The Courier
APRIL 1989 - 9 French francs

CAMÕES and the Portuguese voyages of discovery

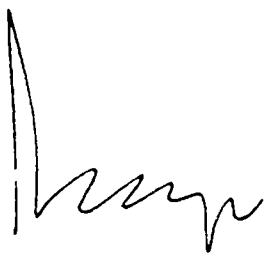
TO OUR READERS

Since the **Unesco Courier** was launched over forty years ago profound transformations have taken place in the scope and limits of human knowledge, in forms of creativity, in the power of communications, and in ways of teaching and learning. Everywhere—in the North as in the South, in the West as in the East—the pace of life and work is accelerating. People belong to an increasingly close network of reciprocal influences and intellectual exchange. They may seek different forms of fulfilment, see the world in different terms and have unequal chances of success and failure, but they feel more and more strongly that they share a common destiny.

It is part of Unesco's mission to foster this awareness by encouraging a spirit of mutual respect and solidarity. The **Unesco Courier** was created to be a mainspring of this process. Over the years it has been produced in conditions which have sometimes been favourable, sometimes less so. There have been occasions when, in the face of international tensions, much perseverance has been required to keep the magazine firmly targeted on its course as an instrument of hope and understanding.

Now a new chapter in the history of the **Courier** is about to open, at a time when the prospects for world co-operation and especially for intellectual and cultural co-operation are steadily improving, when there is a growing determination everywhere to break down barriers of exclusion and distrust, to increase contacts and exchanges on the basis of a common respect for fundamental human rights. The **Unesco Courier** is responding to this challenge by adopting a new editorial formula which will enable its contributors to express their differing viewpoints and its readers to appreciate each month the diversity of the world.

It hardly needs to be said that these innovations, which will be described in detail in the next issue, will follow the guidelines which have for so long earned the **Courier** the loyalty of hundreds of thousands of readers worldwide. At the same time it is hoped that expanded coverage and wider perspectives will attract hundreds of thousands more. Tomorrow, as in the past, the **Unesco Courier** will seek above all to create, in homes and schools, universities and offices, arts and leisure centres, a bond of solidarity which transcends frontiers and combats prejudice, in order to build the defences of peace in the minds of men, through education, science and culture.



Federico Mayor
Director-General of Unesco

April 1989

4
The dawn of a new age
by Luis Filipe Barreto

10
Of caravels and cartographers ...
by Luis de Albuquerque

14
Japan in early Portuguese maps
by Alfredo Pinheiro Marques

17
Luís de Camões
Portugal's great epic poet
by Vasco Graça Moura

26
The Lusiads
From national epic to universal myth
by Eduardo Lourenço

28
Camões and Brazil
by Josué de Souza Montello

30
Rivalry in the Red Sea
Portugal's impact on the fortunes of Mamluk Egypt
by Ibn Iyas

33
'Christians and spices'
The Portuguese in India
by John Correia Afonso

35
Portuguese art in the maritime era
by Rafael de Faria D. Moreira

37
Fernando Pessoa and the spirit of discovery
by José Augusto Seabra

This issue comprises 40 pages and a 4-page advertising insert between pages 23 and 38-39.

Detail from the polyptych for São Vicente, a masterwork of Portuguese art painted by Nuno Gonçalves between 1458 and 1462. Dominated by the figure of St. Vincent, the 6 panels of the polyptych portray a cross-section of Portuguese society. Shown here is the "Panel of the Archbishop", in which St. Vincent is ◀ surrounded by clergy and knights.

The Courier UNESCO
A window open on the world 42nd year

Published monthly in 35 languages English French Spanish Russian German Arabic Japanese Italian Hindi Tamil Hebrew Persian Dutch Portuguese Turkish Urdu Catalan Malaysian Korean Swahili Croato-Serb Macedonian Serbo-Croat Slovene Chinese Bulgarian Greek Sinhala Finnish Swedish Basque Thai Vietnamese Pashto Hausa

editorial

Intercontinental travel by rail, sea and air is today readily available to anyone with the means to pay for it. Accurate detailed maps, charts and guidebooks help travellers choose their route, decide where to stop off, tell them what kind of weather to expect and describe every place they could possibly wish to visit.

It is not easy nowadays to imagine what a fragmentary and fantastic picture of the world our ancestors once had. A glance at the maps produced as late as the fourteenth century in Europe, Asia or the Arab world is enough to show the incompleteness of geographical knowledge and the extent of the mystery which then veiled the contours of the Earth.

A radical change in outlook took place in the fifteenth century when Portuguese navigators began to explore the coasts of Africa; when Bartolomeu Dias rounded the southern extremity of the continent in 1487; and when Vasco da Gama opened up the sea route from Europe to the East in 1498. These men, who crossed with astonishment "seas no man had ever sailed before", were plunged into a host of unexpected encounters between the languages, values and customs of peoples meeting for the first time.

The present issue seeks to give a glimpse of this key period when human history assumed global dimensions. An intellectual, aesthetic and technological revolution had prepared the ground for a process which led eventually to a truly global perception of the world. Centuries later the enterprise of discovery would justly be described by the Portuguese poet Fernando Pessoa as a "civilization-creating act".

We have not attempted to tell the full story of this complex act of creation. We have chosen instead to describe some major events and those who played an important role in them, including the Portuguese poet who splendidly immortalized the voyages of discovery in his epic poem The Lusiads, *Luís de Camões.*

Without glossing over the difficulties, misunderstandings and conflicts which marked this great human adventure, we have sought above all to define its essential contribution to history: the irreversible discovery of human diversity.

The Editors of the *Unesco Courier* wish to thank the following for their kind help in the preparation of this issue: the National Board for the Celebration of the Portuguese Discoveries, especially Professor Alfredo Pinheiro Marques; the Permanent Delegation of Portugal to Unesco; and the Calouste Gulbenkian Foundation, Paris.

Covers: A flotilla of 16th-century Portuguese ships as portrayed in an anonymous Dutch painting of the period. Vessel on back cover is the *Santa Catarina do Monte Sinai*, then considered to be one of the biggest ships ever built. A somewhat fanciful representation of the port and city of Lisbon can be seen in right background of front cover.

THE DAWN OF A NEW AGE

BY LUIS FILIPE BARRETO

AT the end of the fourteenth century, the extent of the known world was, at most, equivalent to barely one quarter of its true area. Islamic civilization was the repository of this knowledge. When, during the fifteenth and sixteenth centuries, gaps in geographical knowledge were gradually filled, it was on the initiative of Christian Europe.

As a result of the great maritime expeditions of this period Portugal became largely responsible for bringing Europe closer to Africa, Asia, the Americas and Oceania. The significance of the Portuguese discoveries in the history of civilizations is that they made an extraordinary contribution to the opening up of the planet. As a result of Portuguese endeavours, Europeans sailed round the Capes of Tarfaya and Bojador, the traditional limits of navigation along the west coast of Africa, which had only seldom been passed. They went on to reach equatorial regions and the southern hemisphere and gave the lie to the traditional European idea that these regions were uninhabitable. These discoveries established for the first time that there was a link between the Atlantic and Indian Oceans—the so-called "route to India"—thus refuting the widely-held traditional view that the Indian Ocean was landlocked.

A new world-picture

As a result of this revolution in communication and knowledge, a relatively accurate picture of the planet began to emerge for the first time. The tropics and the southern hemisphere were not inferior to the northern hemisphere but different, possessing a wider variety of minerals, and plant and animal life. The revolution also made a decisive contribution, in both theory and practice, to the discovery that humankind, one and the same, existed all over the world.

The new awareness of life on a planetary scale, which came into being with the discoveries of the fifteenth and sixteenth centuries, began to stimulate a world economy based on the unequal terms of trade which the Europeans imposed in their dealings with other societies. A mercantile economy centred on cities such as Lisbon and Seville came into being, with central and northern Europe and the Italian cities providing the main outlets and sources of finance.

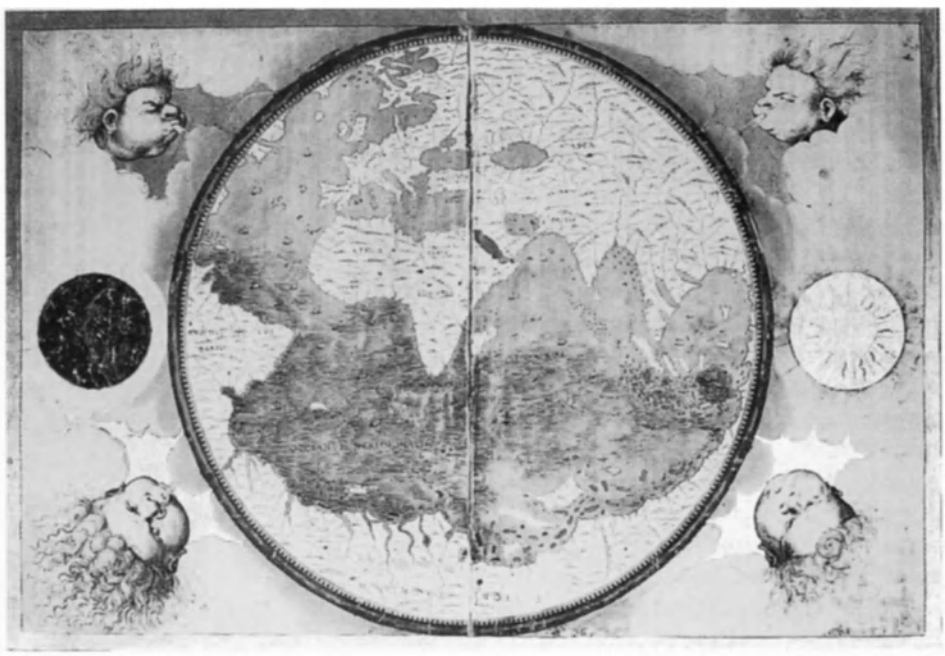
The first signs of a world culture also began to emerge. Books, letters, reports and maps were published and circulated in southern Europe but also in Goa, Macao and Nagasaki. The Portuguese discoveries thus made a fundamental contribution to the transition from an age of tightly-knit societies to a wider, more open world.

Portuguese navigators settled in Madeira and the Azores in the 1420s and 1430s and then advanced through the Atlantic and along the west coast of Africa. Gil Eanes rounded Cape Bojador in 1434. Between 1440 and 1460 further progress was made along the coast of Guinea and the Cape Verde islands were discovered. The islands of Fernando Po, São Tomé, Príncipe and Annobón were discovered in 1470. In 1483, Diogo Cão reached the River Congo and then, in 1487-1488, Bartolomeu Dias established the existence of a link between the Atlantic and Indian Oceans by sailing round the Cape of Good Hope, which he called the Cape of Storms. Vasco da Gama's great voyage of 1497-1499 opened the sea route between Europe and Asia.

In the sixteenth century, the drive for expansion took the Portuguese into the interior of Africa, with the exploration of the Monomotapa empire (present-day Zimbabwe) in 1514, and to the Americas, with the arrival in 1500 of Pedro Alvares Cabral in Brazil and of the Corto Real brothers in Newfoundland. João Rodrigues Cabrilho played a decisive role in the exploration of Florida in 1539 and of California in 1542-1543. The Portuguese also went on to Asia and Oceania, reaching Malacca and the East Indies in 1509-1511, China in 1513 and Japan in 1542-1543.

Other European peoples spread out into the wider world later than the Portuguese, who can be said to have ushered

This map drawn in 1519 by the Portuguese cartographer Lopo Homem is an attempt to reconcile new data collected by European navigators with the time-honoured canons of Ptolemaic geography. The regions of the East and Far East seem to be joined to the lands discovered in the West by Portuguese and Spanish explorers.



The Tower of Belém, left, has stood like a sentinel at the mouth of the Tagus since the early 16th century, when it was built to defend the port of Lisbon. This jewel of Portuguese Renaissance architecture became the symbol of the voyages of discovery. From here sailed ships bound for India, the Americas, Africa, China and Japan.

in a new era of knowledge and human history in the 1420s and 1430s. The first significant date in Spanish expansion was 1492, when Christopher Columbus (1451-1506), who had been enlisted in the service of the Catholic monarchs Ferdinand and Isabella, reached the West Indies. French and British expansion only began in the 1530s. Portugal's geographic discoveries were not only ahead of those of other European countries, but the Portuguese were also the first to reach all the continents (Africa, Asia, the Americas and Oceania) and the major oceans (the Atlantic, the Indian and the Pacific).

As a result of this vast enterprise, Portugal became the repository of a data bank on a planetary scale. For the first time, a worldwide system of material and intellectual exchanges took shape. Never before had such a mass of information in so many fields—from the determination of latitudes, watersheds, and magnetic declinations to botany, zoology, mineralogy—been compiled and classified. The first attempts were also made towards the systematic application of information gathered from different oceans, continents and societies.

Modern marine charts on this page and opposite show (above) the route taken by Vasco da Gama along the coast of Africa and (opposite page) the Atlantic voyages of Diogo Cão, Bartolomeu Dias and the route of Pedro Alvares Cabral to Brazil.

An age of expansion

There were two main stages in the Portuguese discoveries, separated by a period of recession between 1460 and 1469, as a result of the death of Prince Henry the Navigator and of hesitations in the geostrategical policy of King Afonso V (1438-1481).

The first stage began in 1415, with the conquest of Ceuta in Morocco, and ended in 1460 with the arrival of the Portuguese in Sierra Leone. This period corresponded to the emergence of a social, technical and ideological structure geared to the expansion of Portuguese power in the Atlantic and Africa. The thrust of this expansion was directed towards three main objectives: settlement in North Africa, a determination to sail further south than Cape Bojador, and the organization of an area of production in Madeira and the Azores.

The first stage was dominated by Prince Henry the Navigator (1394-1460), a great figure who strove to coordinate the activities of the nobles and merchants, who coveted wealth from agriculture and trade and aspired to control the trade routes, and to reconcile these activities with the imperatives of nationhood and Christian Europe (as dictated by the Papacy and the Order of Christ, a religious order of which Henry was made grand master in 1420).

João de Castro (1500-1548), a Portuguese scholar and explorer who served for a time as viceroy to India, made a major contribution to the science of navigation with his celebrated *roteiros* (pilot books). This portrait is from the Codex Lisuarte de Abreu (1558), in the Pierpont Morgan Library, New York.

The second stage lasted from 1469, when King Afonso V made a contract with Fernão Gomes for the exploration of the African seaboard, to 1498, when Vasco da Gama arrived in Calicut (in the present-day Indian state of Kerala), and opened the way for the establishment of a maritime link between Europe and Asia. King João II (1455-1495) was the main figure behind the organization of this move to conquer the south Atlantic and to link the Atlantic and Indian Oceans. As a result of his policies, Portuguese expansion was largely state-controlled and mercantile. The spheres of influence of the Portuguese crown under its new policy were laid down in the Treaty of Tordesillas concluded with Spain in 1494, which defined the limits to the area of Spanish and Portuguese conquest in the Americas. However, the prime goal of Portuguese policy was the Orient, as witnessed by the overland journeys of Pêro da Covilhã, with the emphasis being placed on navigational technology and science.

Strategic locations

All through the sixteenth century, the Portuguese strove to develop communications within their *Estado da India* ("State of India") and to create a new society in Brazil. The "State of India" con-

sisted of a vast network of relations between different civilizations stretching from the Cape of Good Hope to Japan. It was a system in which Portuguese seafarers, explorers and merchants were at their most mobile, ranging far and wide from East Africa to the Orient in an intensive effort of dissemination and change based on a minimum of linguistic, religious and political unity. The "State of India" was organized on the basis of a small number of territorial possessions covering the widest possible geographical range. Portugal's maritime trading network drew its inspiration from the example set by Islamic "thalassocracy" (mastery of the seas).

In order to hold sway over the largest possible area with a small number of territorial possessions, it was necessary to ensure control over the high seas from a number of strategic locations, such as Hormuz, Goa and Malacca, and it was this plan that Afonso de Albuquerque put into effect between 1509 and 1515. In the meantime, from 1502 onwards, this maritime hegemony, which was instrumental in securing partial control of the seas and the circulation of goods, became a reality, as the Portuguese came to impose the *cartaze* or safe-conduct system on navigation by non-Christian vessels in the Indian Ocean.

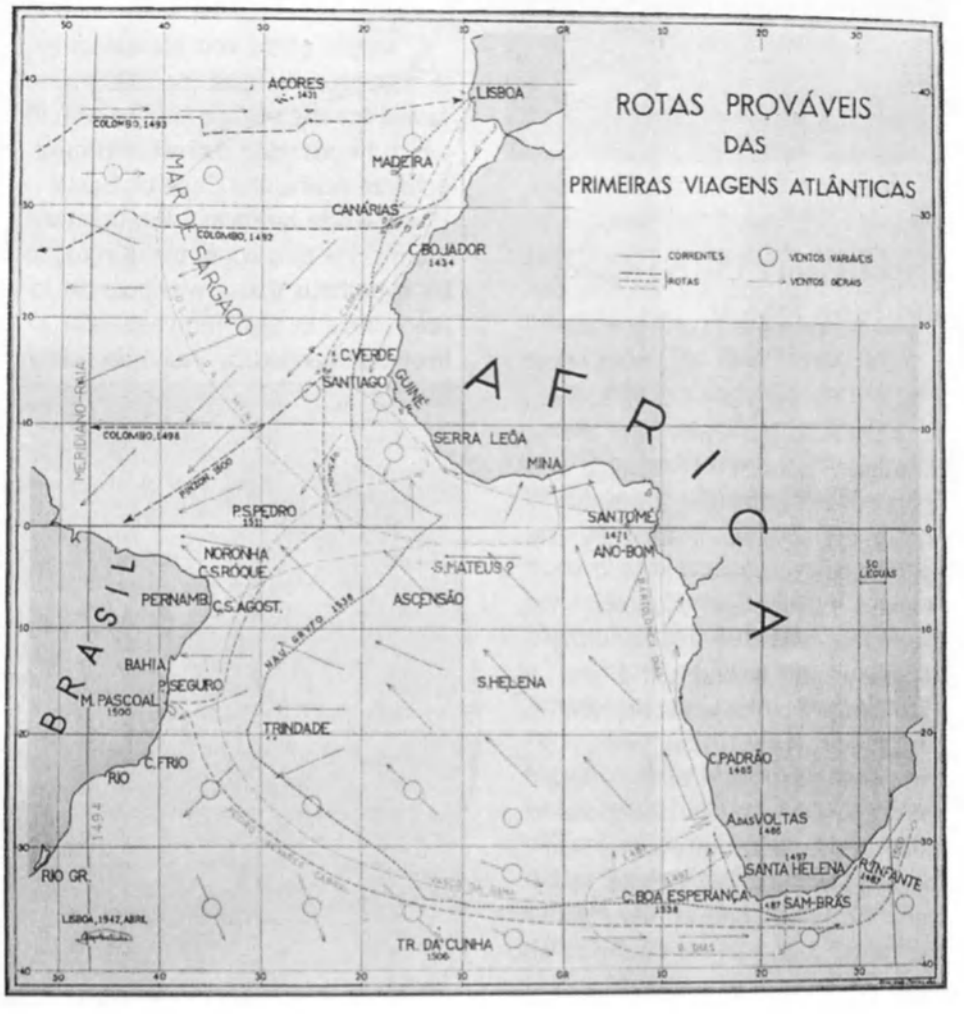
The basic features of the "State of India" were its maritime activity, its mercantile economy and its urban demographic structure. The key social unit was the individual committed to the state and the Church and spurred on by personal initiative. The economic basis of the "State of India's" prosperity was mercantile, its end-purpose being to foster trade both between different regions of Asia and between Asia and Europe. The main commodities involved in this international traffic were pepper and ginger from Malabar and from Indonesia and Malaysia; mace and nutmeg from the Banda Islands in the East Indies; cinnamon from Ceylon; cloves from Ternate; horses from Persia and Arabia; gold, silk and porcelain from China; and gold from south-eastern Africa (the Monomotapa empire) and Sumatra.

The social system of Brazil, unlike that of the "State of India", was based on the landowning colonial families. Society was based on the aristocratic and slave-owning model and wealth took the form of agricultural holdings and slave labour, with stockraising and the monoculture of sugarcane.

The Portuguese of the fifteenth and sixteenth centuries thus practised on a large scale the intermingling of cultures and peoples. They established links between the Christian, Jewish and Islamic civilizations, purveyed commodities and syncretized religions and customs.

At the time of the great discoveries, the Portuguese language came to be the main vernacular of maritime and mercantile communication, especially along the coasts of Africa and the Orient. The fact that Portuguese today has more words of Asian, African and Amerindian origin than any other European language is one result of this far-reaching dialogue between civilizations. ■

LUIS FILIPE BARRETO, Portuguese historian of Angolan origin, is professor of history at the Classical University of Lisbon and author of a number of works on the Portuguese discoveries, including a tri-lingual (Portuguese/French/English) publication entitled *Portugal: A Pioneer of the North/South Dialogue* (Imprensa Nacional, Lisbon, 1988).



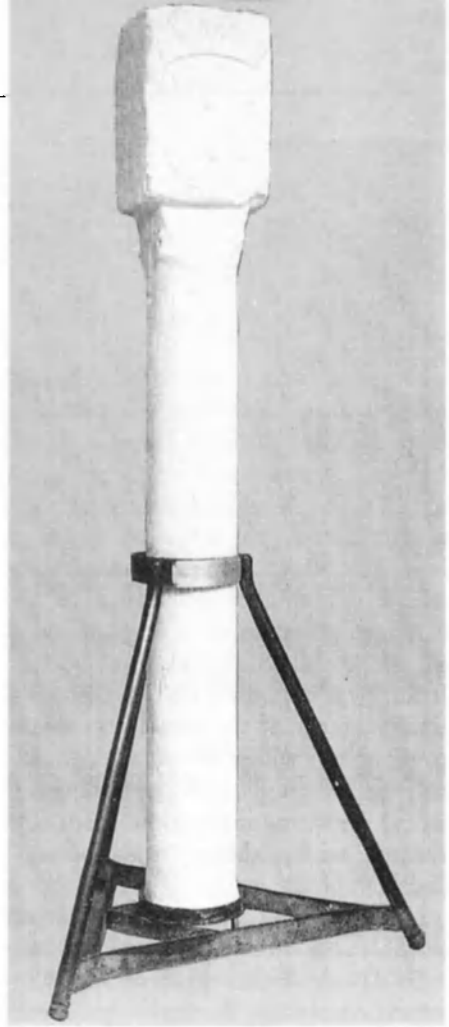
Pioneers of ocean exploration

Prince Henry the Navigator and King João II

Prince Henry (1394-1460), son of King João I, is known as "the Navigator" because he inspired, financed and organized the early Portuguese voyages of discovery. He epitomized Portugal's drive for religious, political and economic expansion, which was given further impetus in the second half of the 15th century by his great-nephew King João II (1455-1495), who continued exploration of the African coast and the quest for the route to India. Above, detail of a panel from the polyptych for São Vicente, by Nuno Gonçalves, shows Henry with the future João II at his side. (See also page 2.)

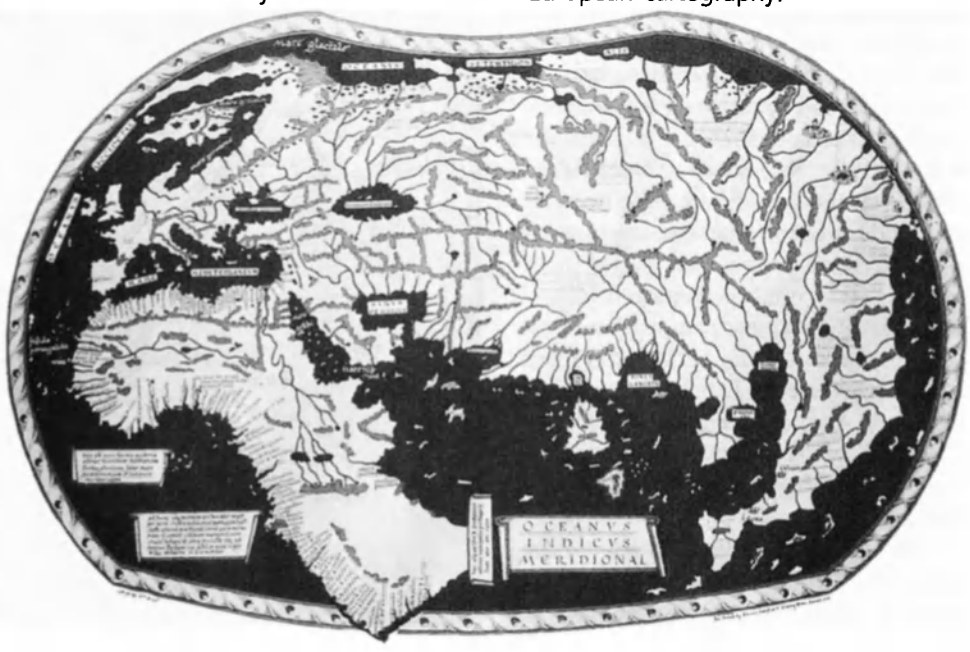
Diogo Cão

King João II commissioned Diogo Cão, a knight of the royal household, to explore the west coast of Africa. The first European to set foot on African soil south of the Equator, he established friendly relations with local rulers in the Congo, Angola and Namibia. During his first voyage, in 1482, he explored the coast between Cape Catarina and Cape Lopez (in present-day Gabon). On a second voyage he passed Pointe-Noire and sailed upriver to explore the interior of the Congo and Angola. Like other Portuguese navigators, he set up engraved stone pillars *(padrões)* in the places he visited, as a result of which it has been possible to retrace his steps. The *padrão* shown here is in the possession of the Lisbon Geographical Society.



Bartolomeu Dias

A knight of the royal household, Bartolomeu Dias (d. 1500), is famed for the voyage (1487-1488) in which he rounded the southernmost point of Africa, the Cape of Good Hope, which he named the Cape of Storms. He thus confirmed King João II's hypothesis that it was possible to reach India by sea. Ten years later a fleet commanded by Vasco da Gama set sail from the Tagus estuary in search of the legendary eastern land of spices and gold. Dias carried out further expeditions and died when his ship went down not far from the cape he had discovered. The map, below, was produced by the German cartographer Henricus Martellus around 1489 and shows the immediate impact of Dias' voyage on European cartography.

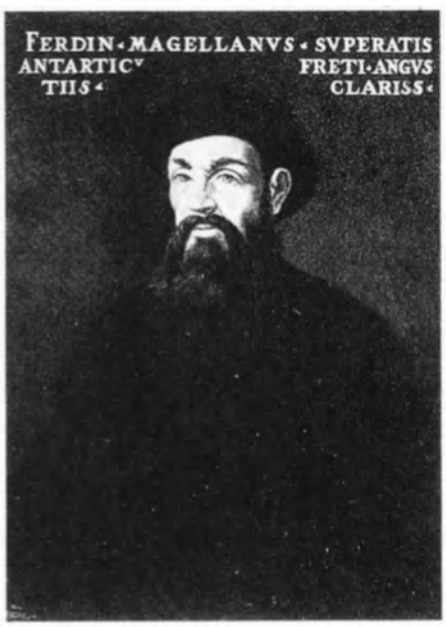


Vasco da Gama

Vasco da Gama (c. 1468-1524), the most celebrated of the Portuguese navigators, carried out several missions for King João II before being appointed admiral of the fleet which sailed around the Cape of Good Hope and opened the sea route from Western Europe to India in 1498, a major achievement for the Portuguese. (Six years before, Christopher Columbus, sailing under the Spanish flag, had tried to find a western sea route to Asia, but instead reached America, the existence of which had not been suspected by Europeans.) Da Gama's fleet sailed from Lisbon on 8 July 1497 and arrived at Calicut, on the south-west coast of India, in May the following year. He met the Zamorin (ruler) of Calicut and gave him a letter from King João's successor, Manuel I, proposing an alliance and a commercial treaty. After his return to Lisbon, Da Gama was made Portuguese viceroy to India. His great voyage of discovery inspired Luís de Camões' epic poem *The Lusiads*.

Fernão de Magalhães (Ferdinand Magellan)

Magellan (c. 1480-1521) commanded the first expedition to sail round the world (1519-1522). While in the East as a soldier in the service of the Portuguese crown, he learned much that proved useful during his great voyage. At that time many Portuguese navigators were offered large sums by foreign rulers to command maritime expeditions, and Magellan entered the service of the Emperor Charles V, who was also King of Spain. The major commercial rivals of the Portuguese, the Spaniards were seeking a western sea route which would take them around the Americas to Asia. Magellan's proposal to sail westwards to the Spice Islands or the Moluccas received royal assent. On 21 October 1520 his ships rounded the southern tip of South America via what would later be known as the Strait of Magellan and entered the ocean which he called the "Pacific". The great navigator did not live to see the conclusion of his project. He was killed in a skirmish in the Philippines and the voyage was completed by the Spaniard Juan Sebastián Elcano. This portrait of Magellan is in the Naval Museum, Madrid.

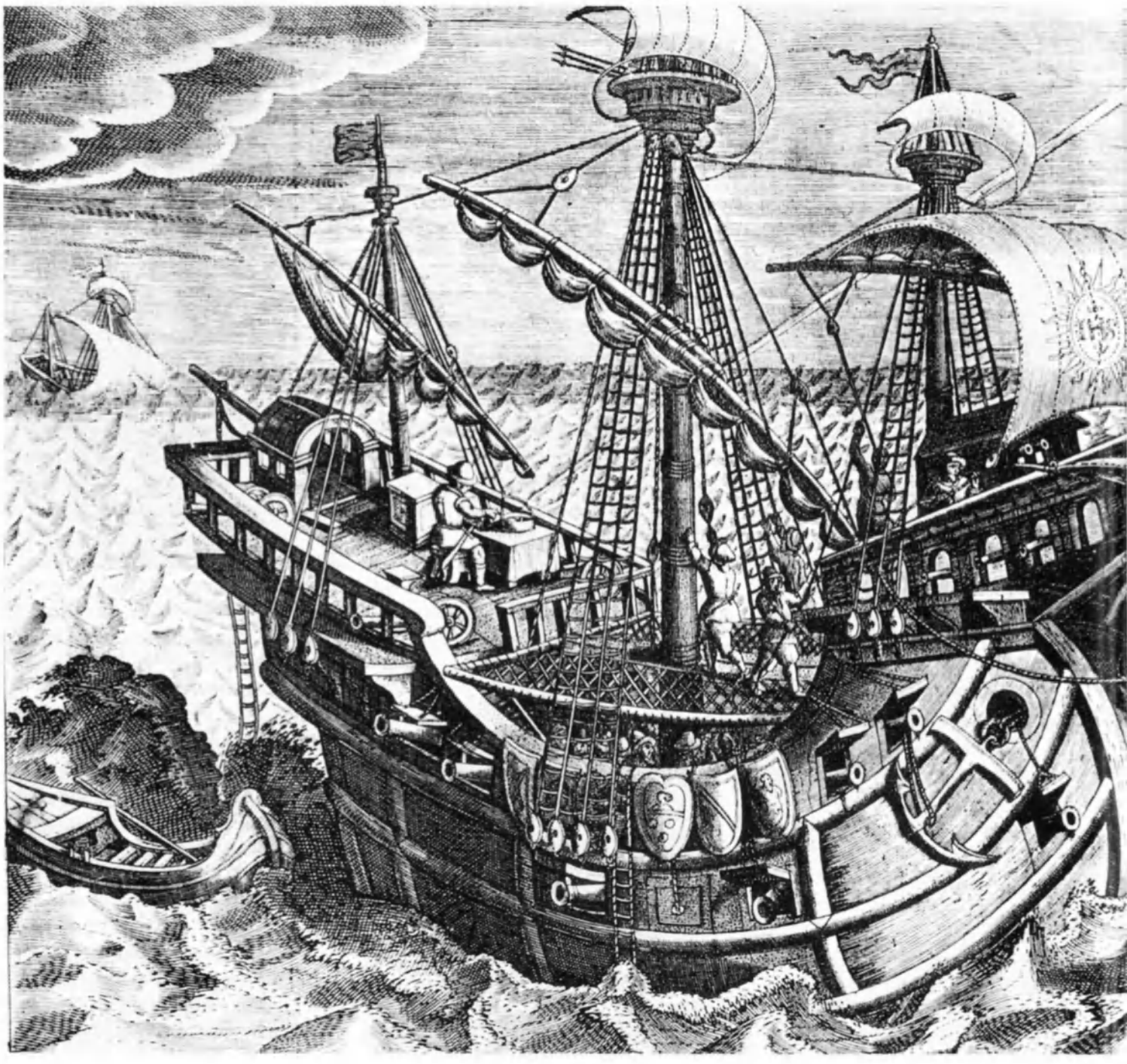


Pedro Alvares Cabral

After Vasco da Gama's discovery of the sea route to India, Pedro Alvares Cabral (c. 1467-1520) was appointed captain of the second Portuguese fleet bound for Calicut. His orders were to establish commercial and political relations with the port, which was then the centre of the spice trade. The fleet, which left Lisbon harbour in 1500, drifted off course and headed west, finally reaching the Brazilian coast at a point which Cabral named Vera Cruz. In spite of the belief that Brazil was discovered by chance, there are several indications that King Manuel I of Portugal had ordered Cabral to find a route to the "West Indies", as the Americas were known. Both the Portuguese and the Spanish were exploring these regions, and the two nations had drawn up the Treaty of Tordesillas in 1494 in order to define the limits of their respective spheres of influence in the New World. Above, statue of Cabral in a Lisbon square.

OF CARAVELS AND CARTOGRAPHERS...

An age of innovation in nautical science and technology

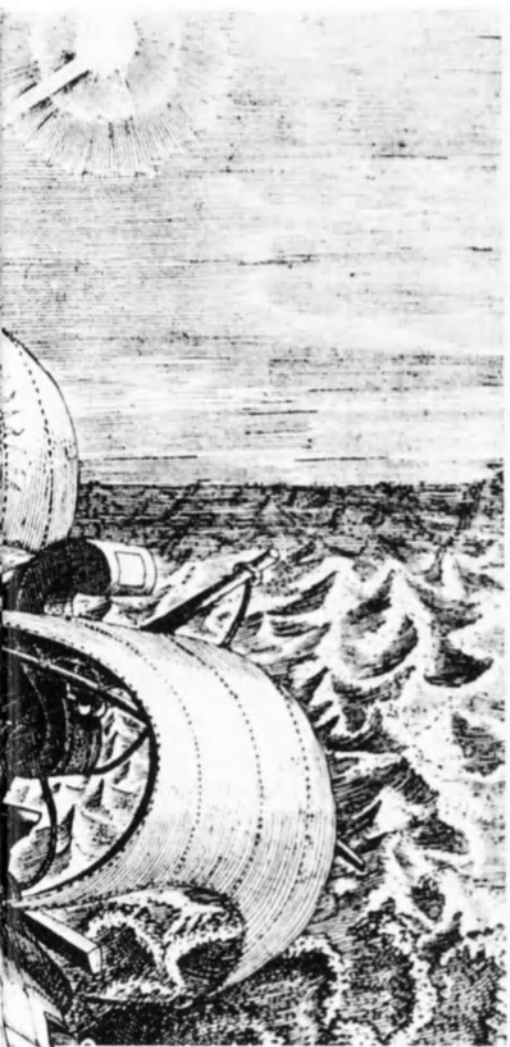


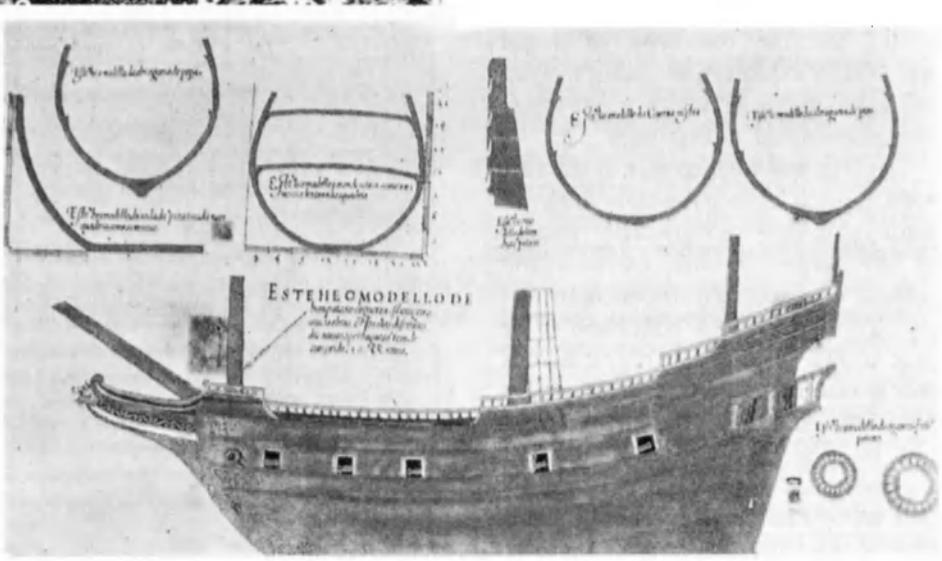
Above: a Portuguese mariner can be seen navigating with the aid of a compass on the deck of a 16th-century ship in this engraving by Jan van der Straet. Right: 17th-century Portuguese vessel of a later type than the caravel, the craft which was widely used on the great 15th-century voyages of discovery and was the main Portuguese innovation in shipbuilding.

BY LUIS DE ALBUQUERQUE

THE scientific and technical developments which took place in sixteenth-century Portugal had their roots in the Atlantic navigation of the previous century or, to be more precise, in the conditions created by ocean navigation and the new possibilities it opened up.

Around the middle of the fifteenth century, navigators began to study sea currents and wind directions as a first step towards understanding the geography of the great oceans. Improvements were also made in shipbuilding techniques, and in the accuracy of navigational instruments. The art of cartography developed in Portugal during the early years of the century, initially inspired by Mediterranean (Italian and Majorcan) models, but eventually acquiring an originality of its own and gaining acceptance in other countries, especially France and Japan. Ptolemy's geographical theories, which enjoyed a revival of popularity from the second decade of the century, were soon being revised in the light of new information.





Sailing the high seas

The study of currents and winds and their variations began when Portuguese merchant and exploratory ships ventured ever further south along the west coast of Africa. The outward voyage was not particularly difficult, but the winds and currents encountered on the return journey frequently slowed down the ships or brought them to a complete halt. The efforts made to overcome these obstacles had three important consequences. Initially, a technique was evolved for dealing with a head or beam wind by going about or tacking, then a lighter vessel better suited to this type of navigation was designed—the caravel. Eventually, returning sailors realized that they would reach their destination more quickly by heading out into the open sea to avoid the problem zones. This manoeuvre, which no doubt accounted for the frequent stops in the Azores, is referred to by modern historians as "the return by the open sea", whereas in the fifteenth and sixteenth centuries it was called the "Guinea return" or the "Mina return". (On the way back from São Jorge de Mina, the Portuguese trading-post on the Gold Coast, now Ghana, ships would change course and head northwest until they reached the approximate latitude of Lisbon.)

These navigational tactics, which obliged ships for the first time to take to the open sea, were bound to confront pilots with unexpected problems. Even when Mediterranean ships sailed beyond the Strait of Gibraltar to the Channel or North Sea ports, they hugged the coastline and could check their position virtually every day by reference to a point on land. On the other hand, the return voyage by the high seas from Guinea, and later from the Gold Coast, to Lagos (in Portugal) or Lisbon, involved sailing "blind" for anything from three weeks to two months. The best moment to change course and head eastwards towards the Portuguese coast could be indicated by the winds, the currents, the colour of the water, or the sea-birds, but this kind of "natural" indication could be extremely unreliable. A means had, therefore, to be found to check the ship's position every day in the absence of any landmark.

Meridians and magnetism

At first pilots calculated the meridian altitudes of the stars (the Pole Star and certain others, and also the sun). Then, at some point in the ocean, with the aid of sextant or astrolabe (later replaced by the quadrant), they compared these celestial observations with the altitudes of the same stars at their meridian transit above Lisbon or some other fixed point of reference.

Initially this procedure was nothing more than an adaptation of a method which John of Hollywood had recommended in his thirteenth-century treatise *Sphaera mundi*, for measuring the length of one degree of a meridian.

This technique was a major innovation in the history of navigation, in that it enabled latitude to be determined almost daily on board ship. However, early-sixteenth-century navigators still lacked a means of determining longitude, which would have made it possible to fix the ship's exact position. If some of them came up with the wrong solutions in their experiments, others would point out their errors, thus enabling different problems to be solved.

Even erroneous calculations were put to immediate use. Convinced that longitude was in direct linear relation to the Earth's magnetic declination, the Portuguese navigators of the sixteenth century noted all the values of this declination (which they would later use as "sightings" or indicators of their position). These accumulated data would prove useful to the English pioneer researcher into magnetism, William Gilbert, and the Flemish mathematician Simon Stevin, when, towards the end of the century, they were studying phenomena connected with the Earth's magnetism, theories regarding which were still at a rudimentary stage.

Portolan charts

The art of navigation had made rapid strides in the second half of the fifteenth century. Pilots had quickly learned to determine latitude from the altitude of stars, or from that of the sun using daily declination tables (showing the distance of the sun's zenith north or south of the Equator on any given day). Apart from these basic data, they possessed readings of the number of leagues covered by different wind-zones (from one compass point to another) and by one degree of latitude, as well as timetables of tides at various points along the coast. The earlier navigational techniques, improved and adapted to the new methods, were also still in use.

All this information was recorded in the navigation manuals and charts known as portolans. The first two of these anonymous guides were published at Lisbon in 1509 and 1516, with some differences between the two editions. Based on sailing experience, they contained the data already mentioned, together with the latitudes of the places most frequented by navigators and an occasionally inaccurate translation of John of Hollywood's treatise, in which pilots learned the rudiments of cosmography.

One of the oldest maps depicting Portuguese voyages of discovery. It was produced in 1485 by the Portuguese cartographer Pedro Reinel and shows for the first time the African coastline as far as the point reached by Diogo Cão.

Despite some inconsistencies, these innovative works, the oldest of their kind, gained widespread acceptance and were wholly or partially imitated until the sixteenth century. Some extracts from them were even translated into French, English, Italian and German.

Caravels, carracks and galleons

Fifteenth- and sixteenth-century navigation had an equally strong impact on shipbuilding. When the first forays took place beyond Cape Bojador, there was as yet no typical vessel, as different designs were being experimented with. But once voyages of coastal reconnaissance, or the exploration of river estuaries, became more frequent, the caravel (or rather caravels, as there was never a standard model) became the type of vessel preferred by explorers, because it was fast and light—qualities which shipwrights were determined to maximize.

Caravels still formed part of the first fleets to reach India in the early sixteenth century, but they were gradually replaced by the larger, heavier carracks and galleons which could transport more cargo. However, caravels continued to be built in the Portuguese shipyards, not only for the reconnaissance missions begun in the Atlantic in the fifteenth century, but also, owing to their lightness, to provide fast connections between the forts scattered along the route to India. Around this time also, ships began to be equipped with a superstructure which enabled cannon to be mounted in them.

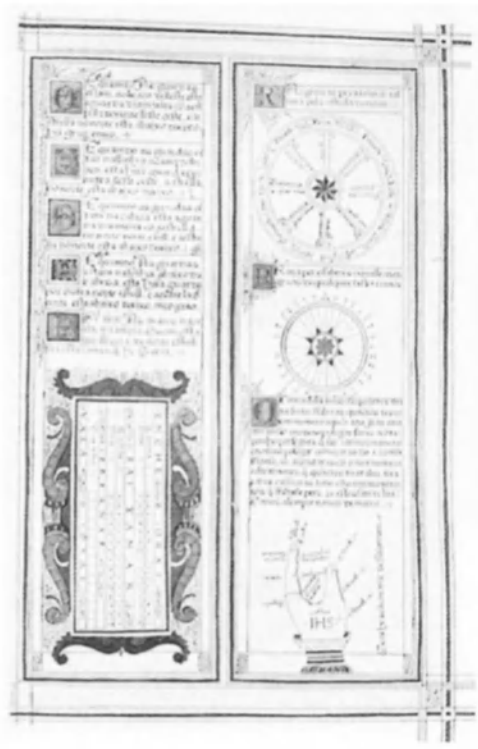
The oldest treatises on shipbuilding that have come down to us, by Fernando Oliveira, João Baptista Lavanha and Manuel Fernandes, are documents of inestimable value for the history of naval architecture.

Progress in cartography

Two significant events sum up the contribution that the transoceanic voyages made to scientific geography. Firstly, about a year after Bartolomeu Dias completed the voyage which virtually proved that the Atlantic and Indian oceans were connected, the German cartographer Henricus Martellus drew a map of the African coast as far as the Rio Infante (not far from the Cape of Good Hope, which Dias had named the Cape of Storms), based upon the data collected by Dias and his predecessors. For the areas beyond—the Gulf, the Red Sea and Ceylon (present-day Sri Lanka)—Germanus relied on the Ptolemaic model.

Equally important was the publication in the fifteenth century of a Latin translation of Ptolemy's *Guide to Geography*, which had been forgotten throughout most of the Middle Ages. Reprinted in 1475, the *Geography* reached its seventh

This page from a manual for use by navigators forms part of an atlas produced in 1571 by the Portuguese cartographer Fernão Vaz Dourado.



The Portuguese were the first sailors to use the astrolabe, a device for taking the altitudes of celestial bodies, as a navigational instrument. This 16th-century example is preserved in Lisbon's Maritime Museum.

edition in 1490. It reappeared in 1507, and the eleventh edition, published in Strasbourg in 1513, included new maps, the *tabulae novae,* which showed the configuration of all the lands and inhabited islands which had been recorded by navigators up to that time.

A planisphere included in the Strasbourg edition is modelled on the anonymous Portuguese map of the world, the so-called Cantino map (after Alberto Cantino, the Italian who purchased it in Lisbon). Although not dated, it was probably made in the early autumn of 1502. The Equator and the two Tropics are represented for the first time on this map (see centre colour pages). Later, on a map of the Atlantic which has been dated at 1504, Pedro Reinel incorporated a scale of latitudes—the first in the history of cartography.

Portuguese sixteenth-century cartography won wide recognition, not because of its revolutionary nature, but because it showed with some degree of accuracy many parts of the world which were previously unknown, or little known, in Europe. Portuguese cartographers were also to be found at this period in Spain (Jorge Reinel and Diogo Ribeiro), France (Lopo Homem and Bartolomeu Velho) and England (Diogo Homem), where their work was generally very well paid. Dutch engraved cartography of the late sixteenth century also made occasional use of the services of Portuguese cartographers such as Luís Teixeira, founder of a dynasty of map-makers which flourished until the end of the seventeenth century.

The discoveries recorded in guidebooks and travelogues

The achievements of the Portuguese voyages of exploration were to culminate in the discovery of Brazil, the opening of a complex network of maritime routes in the Indian Ocean, the occupation of Malacca and the penetration of the western Pacific, followed by the Portuguese arrival in China and the Moluccas Islands and finally in Japan. Many men, driven by the pursuit of wealth and profit, no doubt, but also curious and observant, travelled through previously unknown lands and cities, cast anchor in faraway ports, mixed with peoples who differed from them in language and customs, and discovered many kinds of fauna and flora. All these discoveries were passed on in works that are remarkable for the accuracy of their information and the understanding and respect they show for people's myths and beliefs.

Around 1513, for example, *A Suma Oriental* by Tomé Pires, an apothecary who died in China, provided not only botanical observations but a veritable commercial guide to the Orient. Duarte Barbosa produced a similar work in 1518, and Francisco Alvares wrote a monograph on Abyssinia which was published in 1540. In 1587, Gabriel Soãres de Sousa completed a wide-ranging treatise on the Indians of the Brazilian coast, the scientific rigour of which would do credit to a modern ethnologist. Father Gaspar da Cruz wrote about China and Hormuz, an anonymous author left a description of the Moluccas, and Garcia da Orta and Cristóvão da Costa produced excellent studies of the medicinal plants of the East.

If we add to this list, which is far from exhaustive, the texts on the art of navigation which were written in the same period, if we think of the role played by the portolans, travelogues and, especially, the innumerable marine charts, and if we point out that some of these works, in translation, found their way into the priceless collections of the Italian geographer Giovanbattista Ramusio and of other scholars, we gain at least some idea of how a small country, with a population of less than two million, participated in the birth of the modern era and in the irresistible European expansion that was destined to last for four centuries. The Portuguese and their cultural and geographical neighbours thus contributed to the construction of the world in which we live. ■

LUIS DE ALBUQUERQUE, Portuguese specialist in the history of science, is Professor Emeritus at the University of Coimbra. A member of the Portuguese Academy of History and of the International Academy of the History of Science, he has published over 800 works including *História dos descobrimentos* (1985), *Navegadores, viajantes e aventureiros portugueses* (1988) and, in English, *Nautical Instruments* (1988) and *Astronomical Navigation* (1988).

JAPAN IN EARLY PORTUGUESE MAPS

BY ALFREDO PINHEIRO MARQUES

This 16th-century Japanese screen showing the arrival of the Portuguese in the Land of the Rising Sun is a typical example of Japanese *nanban* art in which European ships, figures and goods were depicted.

LATE medieval Europe possessed only sketchy knowledge of Japan, and such fantastic and muddled information as existed was largely culled from a single source, *The Book of Marco Polo.* Although the Venetian traveller never reached the Japanese archipelago, he wrote about a mythical land, *Cipango,* which Christopher Columbus was hoping to find on his first voyage in 1492.

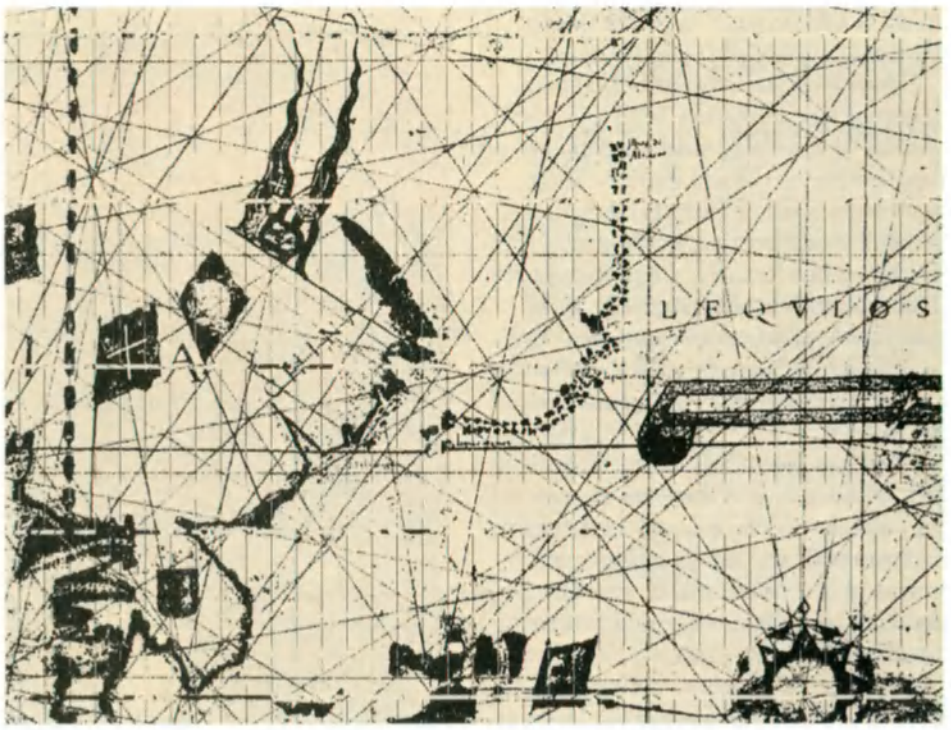
The Portuguese were the first to discover the sea route to India and the Far East, and sometime in the early 1540s a group of adventurers which included the famous Fernão Mendes Pinto (author of an exciting travelogue, *Peregrinação)* became the first Westerners to set foot on Japanese soil. Their arrival marked the start of an exemplary cultural exchange which was to last for almost a hundred years, and which was a source of mutual enrichment to Japanese and Portuguese alike.

Cartography was one field in which this encounter between cultures found expression. The Portuguese were at that time the European masters of navigation and of mapmaking techniques. As they became more familiar with the Japanese archipelago, they included it on their charts and maps and

thus helped to make Japan known in Europe, where these maps were much sought after.

A Portuguese, Tomé Pires, was also the first Western author to use the name Japan *(Jampon)* in a non-cartographical work, *A Suma Oriental* (1512-1515). According to Professor Armando Cortesão, the first accurate depiction of Japan in European cartography after the country had been visited by Westerners is on an anonymous Portuguese map (c. 1550) preserved in the Vallicelliana Library in Italy. This is also the first European map on which the name Japan appears.

Japan had previously been depicted conjecturally on a number of European maps, notably the *Insularium illustratum* by the German cartographer Henricus Martellus (c. 1490) and in the work of a number of Portuguese cartographers such as Francisco Rodrigues (1515), Pedro Reinel (c. 1517) and Lopo Homem-Reinéis (c. 1519), based on secondhand information gathered in the Orient, in Malacca and in Indochina.



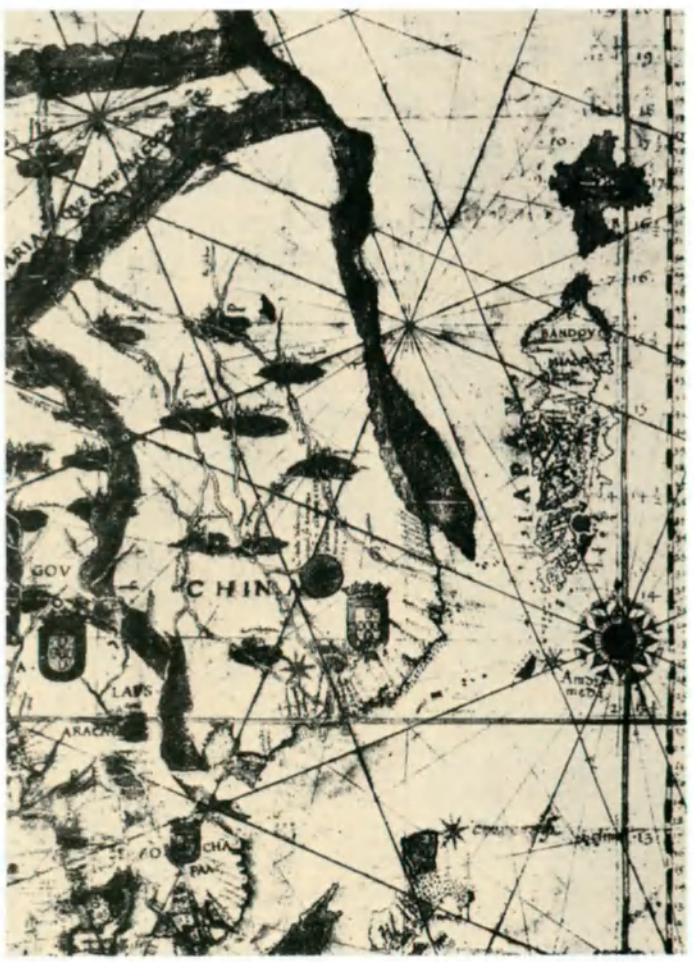
Detail, above, from a mid-16th-century map by an anonymous Portuguese cartographer may be the oldest depiction of Japan in European cartography. The map is now in the Vallicelliana Library, Rome.

In the 1550s and 1560s, the Italian cartographers Paolo Forlani and Giacomo Gastaldi drew maps which were based, not on Marco Polo's reports but on information from the writings of St. Francis Xavier, the Spanish missionary who preached Christianity in Portugal's Asian possessions. But these maps had no great following, unlike those of the Portuguese, which were widely copied and became the model for the representation of the Japanese archipelago in Western cartography. At this time the influence of two Portuguese mapmakers, the brothers Lopo and Diogo Homem, was widely felt. Between 1560 and 1580 another Portuguese, Bartolomeu Velho, produced a series of maps in which the orientation and configuration of the Japanese islands were depicted with increasing accuracy. In 1569 the Flemish cartographer Gerardus Mercator combined Gastaldi's map with the anonymous map of the 1550s. In 1570 Abraham Ortelius of Antwerp followed Bartolomeu Velho's model when including Japan in his world atlas.

Meanwhile, another type of map of Japan was being produced by Portuguese cartographers, showing the archipelago in the form of four crescent moons with their extremities turned towards the south. This model appears for the first time in the anonymous Portuguese atlas which accompanies the *Livro de Marinharia* (Book of Seamanship) *de João de Lisboa,* published around 1560. Although less accurate than Bartolomeu Velho's map, this model came to predominate and was widely accepted in Europe, where it was diffused by Fernão Vaz Dourado (a Portuguese cartographer born in Goa of an Indian mother) in the many atlases he produced between 1560 and 1570, and thus is often known as the "Vaz Dourado type".

Towards the end of the sixteenth century, more accurate maps were being produced by the Portuguese cartographer Luís Teixeira, and these were further refined by his son, João Teixeira Albernaz, during the first half of the seventeenth century.

The Portuguese were responsible for making known the image of Japan in Europe, but this was not a one-way process. On the contrary, it is thought that Japanese maps were used as sources by the Portuguese, especially in the earliest period and notably in the work of Lopo Homem, in which the influence of Japanese



Japan is more accurately shown in this map drawn by the Portuguese cartographer Bartolomeu Velho in 1561 (Library of the Academy of Fine Arts, Florence).

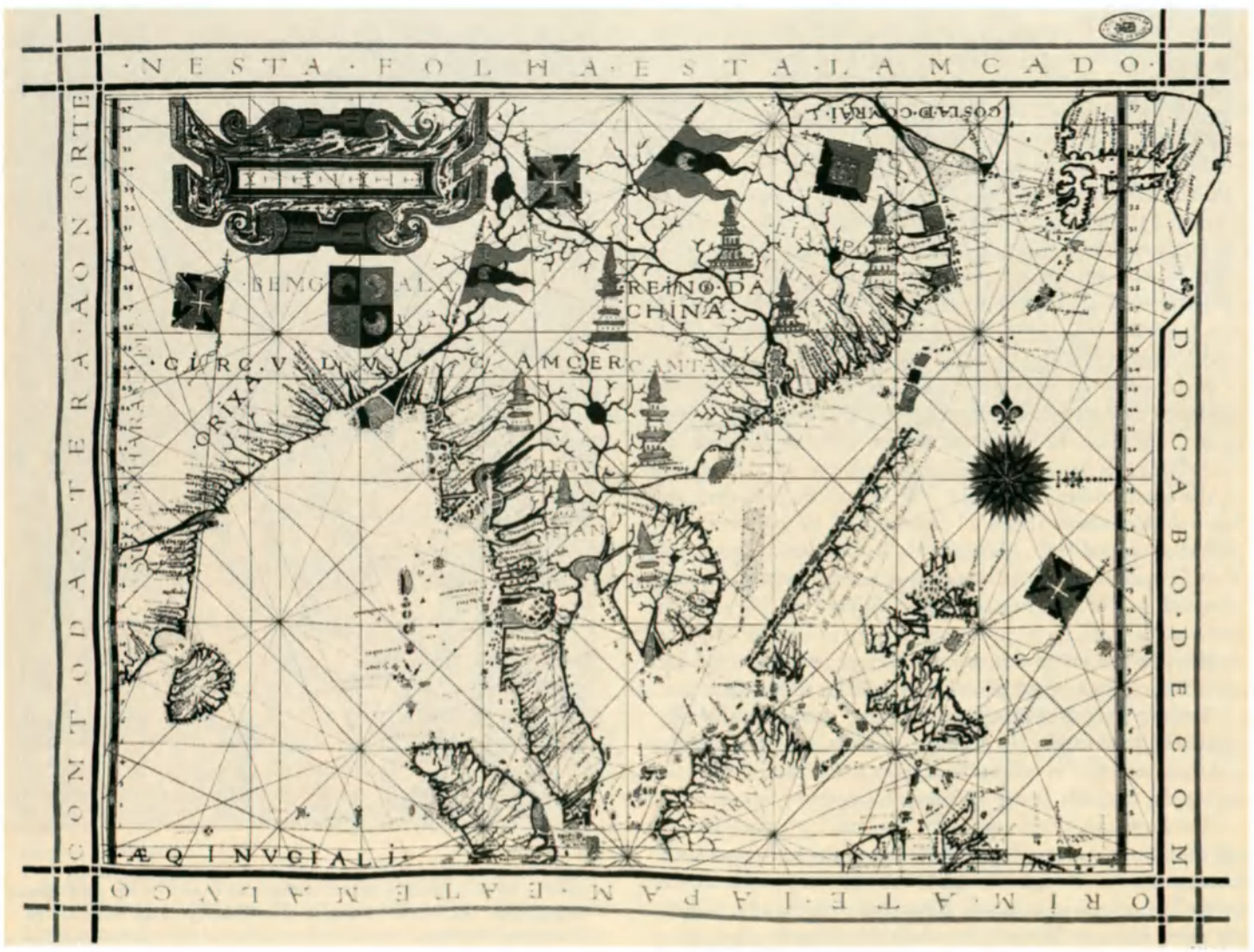
maps of the "Gyogi" type can clearly be seen.

Moreover, as Professor Kazutaka Unno of the University of Osaka has shown, the development of modern Japanese terrestrial and marine cartography was based on Portuguese navigational maps rather than on those of the Dutch, as had formerly been thought. This influence became apparent in the sixteenth century and continued to bear fruit for 200 years, even after Portuguese relations with Japan had come to an end.

This mutual influence in cartography is surely one of the most interesting aspects of the cultural exchange between two nations, so different and yet so close, which set an example of peaceful and fruitful dialogue between civilizations of Orient and Occident in the sixteenth century. ■

Maps on this page show the increasing accuracy with which Portuguese cartographers depicted Japan. Map below dates from 1571 and shows Japan in the form of a half moon. It is now in the Portuguese National Archives, Lisbon. In the map above, produced in 1640 by a cartographer of the school founded by the Teixeira family, Japan is much more correctly depicted (Library of the Port of Toulon, France).

ALFREDO PINHEIRO MARQUES, of Portugal, is professor of history at the University of Coimbra. His most recent publications include *Origem e desenvolvimento da cartografia portuguesa na epoca dos descobrimentos* (1988), and, in English, *The Dating of the Oldest Portuguese Charts* (1989). He is currently preparing an *International Bibliography on the Discoveries and Overseas Encounters* and serving as scientific co-ordinator on the Portuguese Commission for the Seville Universal Exhibition of 1992.



LUÍS DE CAMÕES

BY VASCO GRAÇA MOURA

The eventful life and times of Portugal's great epic poet

Possibly the most faithful of the few surviving portraits of Camões is this copy of a work, now lost, by his contemporary Fernão Gomes.

THE little that is known about the life of Luís de Camões can be summed up in a few lines. He was probably born in Lisbon in 1525, but even this is not known for certain. Nothing is known about what he studied or where (possibly in Coimbra) and next to nothing about his life until he set sail for the Orient, where he spent seventeen equally obscure years. A few biographical hints can be gleaned from his writings. It seems, for example, that he had a rather hectic love-life, and it was perhaps because of his way of life that he was banished from the court as a young man. He is known to have served as a soldier in Ceuta, Morocco, around 1547-1548 and to have lost his right eye there.

In 1552, he spent several months in prison in Lisbon for taking part in a brawl and after his release in the spring of 1553 embarked for India on three years' service, as was the rule at the time. While in India, he took part in a number of military expeditions. Sometime between 1556 and 1558, he set out for the Far East, perhaps as a junior official responsible for taking care of the effects of people who died on the voyage. It is not known with certainty whether it was on the outward or return voyage that he was shipwrecked in the Mekong estuary, swimming ashore carrying nothing but his manuscript.

When he returned to Goa, he was again thrown into prison. After his release he lived on the island of Mozambique between 1567 and 1569, returning to Portugal in 1570 in a state of dire poverty. By then, however, the text of his epic poem was virtually ready for publication.

He published *Os Lusíadas (The Lusiads)* in Lisbon in 1572, and then two short poems in 1576. In 1572, the king granted him a small pension, but Camões later had to submit a claim for arrears of payment.

Nothing more is known about his life in Portugal after 1570. He appears to have been the butt of epigrams composed by authors who were in favour at court, which may suggest that he was envied either on account of the stature of his work or because of his pension. He may then have gone through a mystical, "penitential" phase if, as is supposed, his magnificent verse commentary on Psalm 137 ("By the waters of Babylon") was written after *The Lusiads*. In 1574, a short but enthusiastic critique of his work was published, in which the author, Pero de Magalhães Gândavo, wrote: "Look at the work of our celebrated poet Luís de Camões, whose fame will outlast time."

We know neither the precise date of his death (sometime between 1579 and 1580) nor the location of his tomb in the Santa Ana church, which was destroyed in the Lisbon earthquake of 1755. Not a single manuscript in his own hand has survived, and even the portraits of him are disputed.

In the sixteenth century, *The Lusiads* was twice translated into Spanish, and there appeared a collection of his unpublished writings, editions of his lyric poetry (1595 and 1598) and two more editions of *The Lusiads*, one (severely mutilated) in 1584 and the other in 1597. From then on a strong and still continuing interest began to be taken in Camões' life and work and attempts began to be made to decipher the mysteries in which they were veiled.

Camões lived during the last phase of Portuguese expansion, at a time when his country was on the verge of decline and

OS LVSIADAS

DE LVIS DE CAMÕES.

Canto primeiro.

As armas, & os barões assinalados,
Que da Occidental praya Lusitana,
Por mares nunca de antes navegados,
Passaram, ainda alem da Taprobana,
Em perigos, & guerras esforçados,
Mais do que prometia a força humana.
E entre gente remota edificarão
Novo Reino, que tanto sublimarão.

E tambem as memorias gloriosas
Daquelles Reis, que forão dilatando
A Fee, o Imperio, & as terras viciosas
De Affrica, & de Asia andarão devastando,
E aquelles que por obras valerosas
Se vão da ley da Morte libertando.
Cantando espalharey por toda parte,
Se a tanto me ajudar o engenho & arte.

A (essem

Frontispiece and opening page of the first edition of *The Lusiads* published at Lisbon in 1572. The work is now in the National Library, Lisbon.

political collapse. His death one or two years after the defeat of Alcazarquivir (1578) more or less coincided with Portugal's loss of independence to Spain, a situation which was to last until 1640. Yet, at the same time, Camões lived through a period of intellectual activity which has a remarkable place in the social, cultural, economic and political history of Portugal, Europe, and the world.

The values enshrined in the classical humanism of the Renaissance, which began to spread through Europe from Italy at the end of the fifteenth century, came to be blended with echoes from the teachings of the Dutch humanist Erasmus and with the multifarious debates and conflicts sparked off by the Reformation and by the growing theoretical and practical consolidation of centralized power. The geographical discoveries brought in their wake a mass of new information about the extent and true appearance of the world. They led to encounters with many other peoples, and brought into contact a profusion of different cultures and civilizations. Much-coveted produce and new sources of wealth arrived daily in the ports of Europe. The secrets of the planet were gradually being discovered. The circulation of printed information was increasing.

These upheavals brought with them a growing sense of unease which was reflected in the arts by a transition from classicism to mannerism, in politics by increasingly authoritarian forms of government, and in civil and intellectual life by censorship, the repression exercised by the Inquisition, the concealment of unorthodox thinking, and fear. But they also led to rapid changes in customs, attitudes and social structures, greed, the discovery of new ways of making easy money, changes in patterns of consumption, and the depopulation of inland areas due to the attraction exercised by commercial life in the capital and overseas.

Science in turn began to concern itself with the quantifiable aspects of the world and with the criticism of empirical data, while emphasis was placed on experience and new ideas which would prove the Ancients wrong.

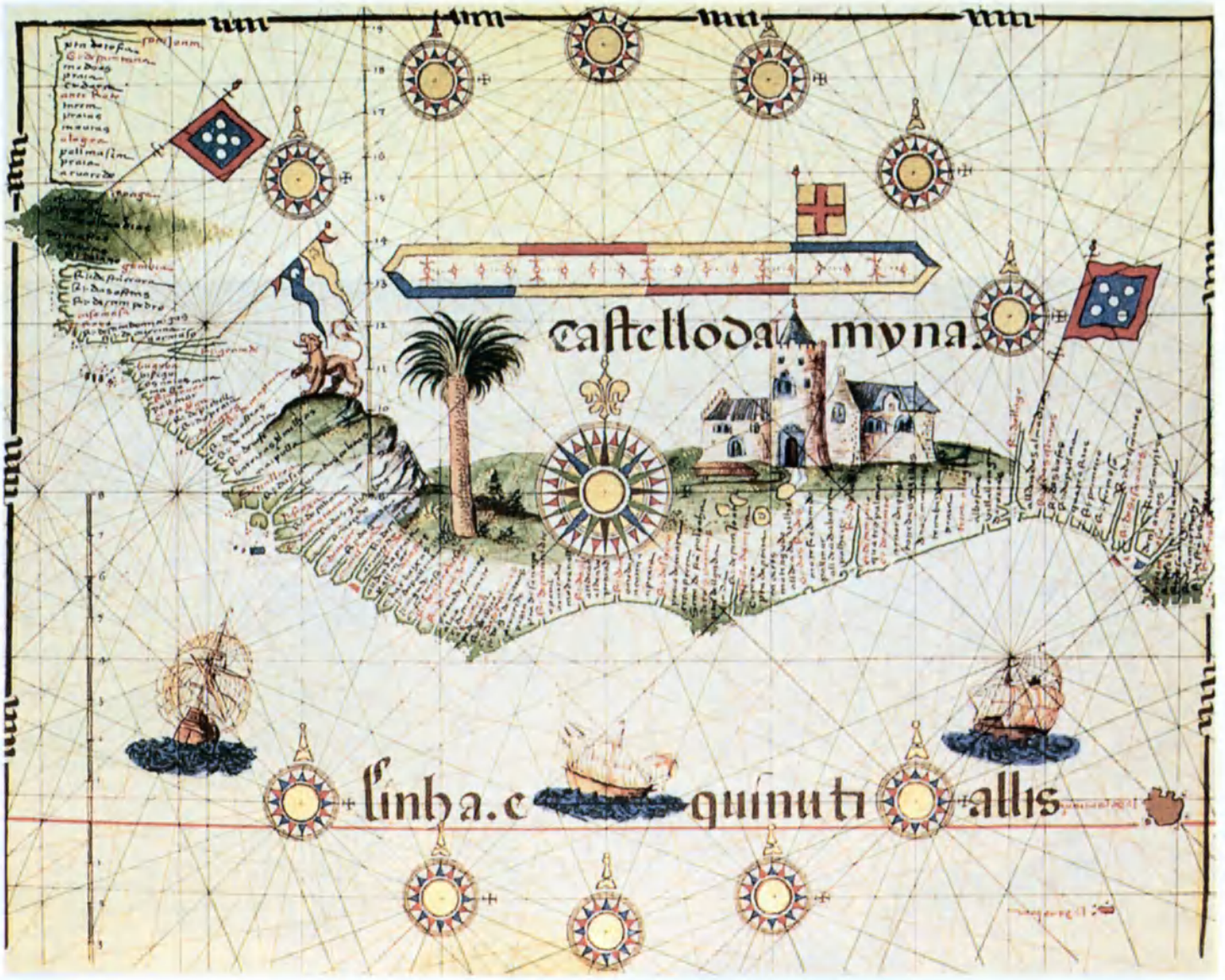
An age of ferment

The voyages of discovery opened up new and often contradictory ways of thinking, and new and sometimes startling horizons beckoned to those with a taste for adventure and enterprise, willpower and daring, speculation and wealth, travel and danger, freedom of action and fatalism. The times incited men to live dramatic lives in an age in which the most clear-sighted of them saw the Portuguese venture as a form of European expansion whose common denominator was the propagation of the Christian faith, even though, like Camões, they criticized the divisions among the Christians and claimed for Portugal the role of prime agent of Catholicism outside Europe. Camões was undeniably the poet of a system of values proper to the European culture and civilization of his age.

The dominant ideology took full measure of the universal impact of the Portuguese discoveries, compared them and found them superior to the legendary exploits of the heroes of classical Antiquity, and wished to hear them celebrated in the classical form of the epic poem.

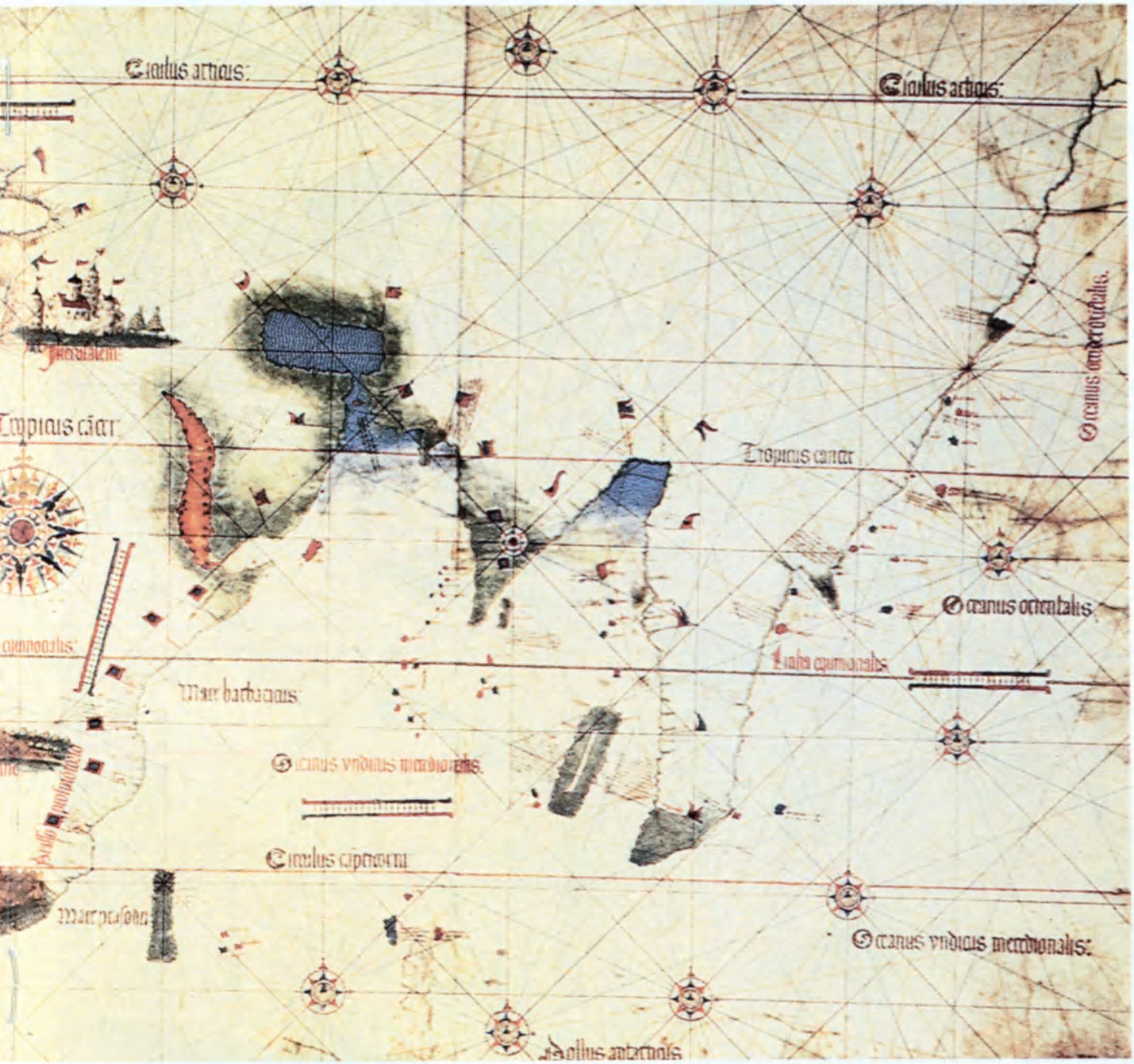
The voyage of Bartolomeu Dias round

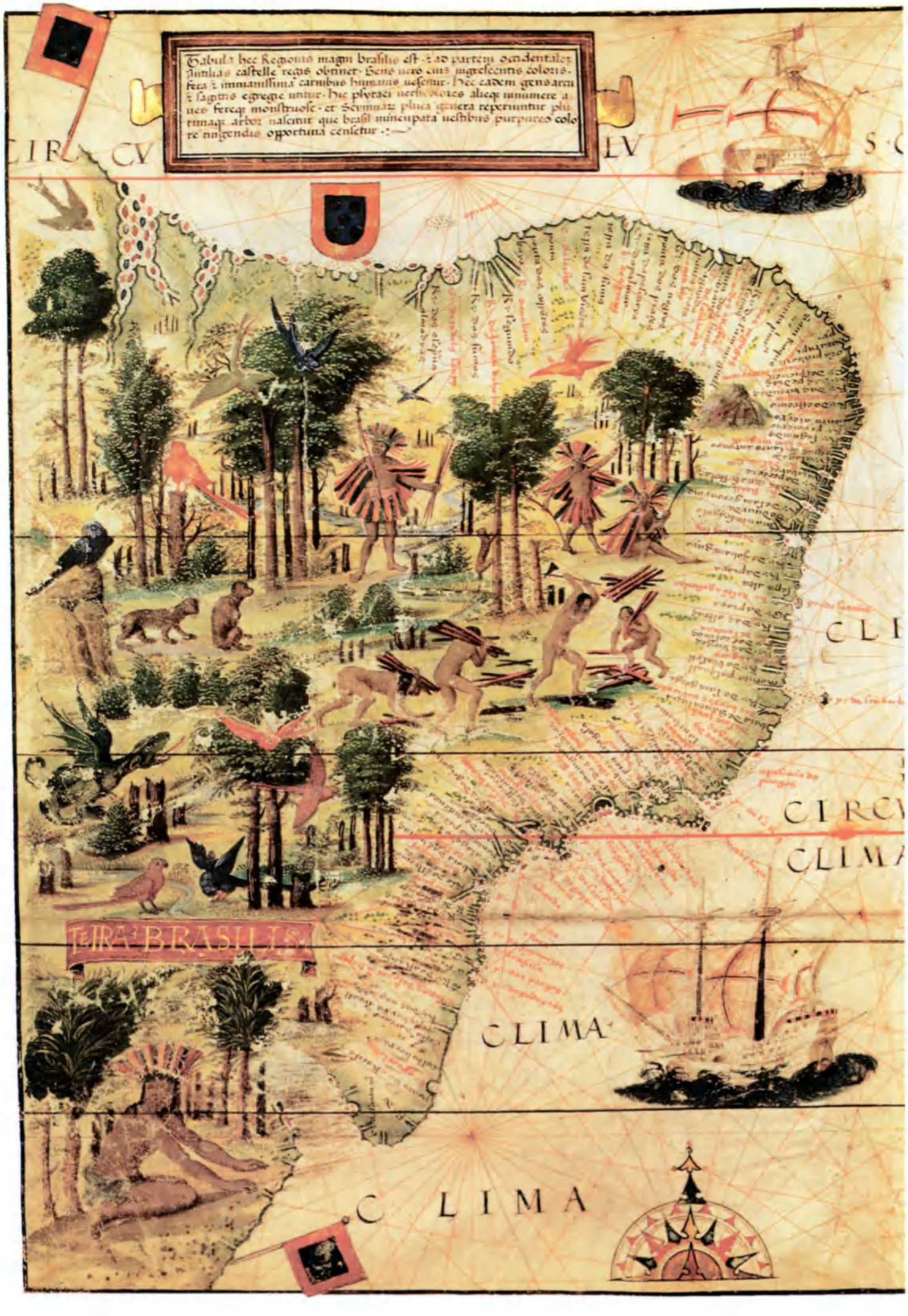
This depiction of Lisbon in the 16th century appeared in a great atlas, *Civitates orbis terrarum* ("Cities of the World", 1577), published by Georg Braun and Frans Hogenberg.


castelloda myna.
linha.c quinuti allis

ONDE PODE ACOLHER-SE UM
NSERENO CONTRA UM BICHO
D TERRA TAO PEQUEN
EGURA A CURTA VIDA QUE NA
E ARME E SE INDIGNE O CEU

Circulus arcticus:
Oceanus occidentalis
Has antilhas del Rey de castella:
Os montes darms em africa:
Equinoctialis:
Tropicus capricorni:
Mare oceanus:
Polus antarticus:


Circulus arcticus
Circulus arcticus
Tropicus cancri
Tropicus cancri
Oceanus occidentalis
Oceanus occidentalis
Mare barbaricum
Oceanus vndicus meridionalis
Circulus capricorni
Oceanus vndicus meridionalis


Tabula hec Regionis magni brasilie est · ad partem occidentales similias castelle regis obtinet · Gens uero eius ingrescentis coloris · fera · immanissima · carnibus humanis uescitur · hec eadem gens arcu · sagittis egregie utitur · huc plyrace · serpentes aliaque innumere ·
CIR CV
LV
CLI
CIRC
CLIMA
TERRA BRASILIS
CLIMA
CLIMA

the Cape of Good Hope in 1488, four years before that of Columbus, revolutionized geographical concepts and marked the threshold of a new era. Ten years later, the voyage of Vasco da Gama made an even more radical contribution to the transformation of European civilization and world history. In the ensuing decades there were many other Portuguese voyages of major importance. But there was no creative work of art to extol the feats responsible for these sweeping changes.

A poet of his time

It was against this background that Camões lived and wrote his epic and lyrical work, in which so many contradictory elements coexist: tradition and innovation; Platonism and Aristotelianism; erudition and raw experience; mythology and Christianity; piety and cruelty; feudal nostalgia and the concept of the modern state; a sense of order and disorder; joy and anguish; the Renaissance and Mannerism. In Camões, there is a tension between the concept of man as a "mean creature of clay" and the grandeur of his accomplishments on a global scale, between the frail microcosm who can overcome obstacles when aided by heaven or by valour and daring, and all the harm that can befall him if he becomes the mere plaything of the occult forces of Nature, fortune or destiny.

At sea by such rough storms and griefs forespent!
So many a moment when Death stands alert!
Ashore such strife and treacherous intent,
Where horrible necessity can hurt!
How can weak man escape the harsh event,
And how misfortune from brief life avert,
Where calm Skies range not nor take arms alway
Against so mean a creature of the clay?
The Lusiads, * I, 106

However, a similar tension also exists between Camões' national pride and his harsh and biting criticism of the very human reality whose praises he is singing:

Alas! my Muse, alas! because my lyre
Is wholly out of tune and my voice hoarse,
Not from my song, but knowing I must quire
Always for a people who are deaf and coarse.
The favour which sets genius all on fire
My land grants not to song, but runs perforce
After its envious lusts and brutishness,
Sunken in harsh, depraved, and gross distress.
The Lusiads, X, 145

These antagonistic ideas are repeated again and again throughout the complex structure of a poem in which the symbolic linking of different levels of meaning represents a striking and innovative feat of literary "engineering".

Thus Camões' account of the Portuguese discoveries is based on the unique relationship which he established between the tradition of classical Graeco-Roman culture as it was expressed in the

Clockwise from top: Frontispiece of a Spanish version of *The Lusiads* published in 1580 and the earliest editions in English (1655), Italian (1658), French (1735) and Dutch (1777).

COLOUR PAGES

Page 19

Above: The sea's eternal mystery, a constant source of attraction to the Portuguese, suffuses this painting entitled *The Siren* by Portuguese artist Vieira da Silva (b. 1908). The mermaid is curved like a caravel, a type of ship much-used on the voyages of discovery, and is surrounded by lines from Camões' poem *The Lusiads*.

Below: In 1482 King João II of Portugal ordered the construction of Elmina Castle (on what is now the coast of Ghana) in an attempt to preserve a monopoly in the gold trade. The fortress is shown on this map produced by the cartographer João Freire in 1546.

Centre double page

The work of an anonymous cartographer, the Alberto Cantino map (1502) is world famous as the oldest known Portuguese planisphere. Mediterranean Europe and Africa are depicted, together with regions of the East and the Far East. In the west, the Spanish possessions of central America are framed by Newfoundland to the north and parts of Brazil to the south.

Page 22

Detail from a map of Brazil by Lopo Homem-Reinéis, which shows *Teira Brasilis* for the first time with a certain unity. Indians and specimens of the local flora and fauna adorn the map, which forms part of the *Miller Atlas*, one of the finest treasures in the history of cartography.

literary forms imported from Italy and the renewal of the literary language, and the historical events of his time, especially the information accumulated about the great ocean voyages.

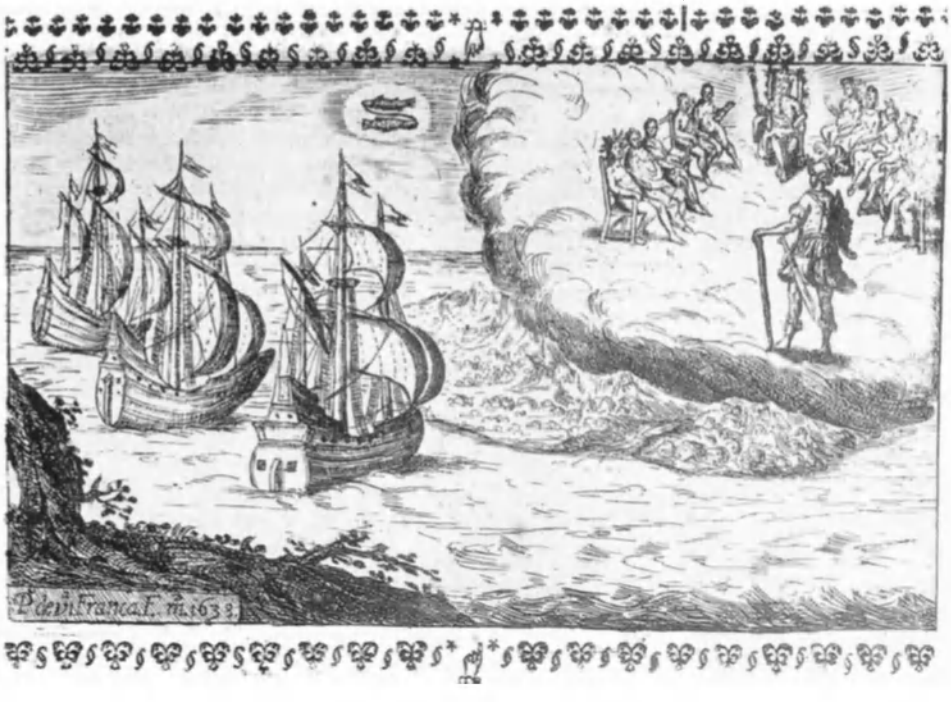
Camões made use of the epic form in a new way, so that actual geographical regions and mythical regions, real or contemporary time and mythical or absolute time, historical events and cosmic destiny, were all welded together and "contaminated" one another. Even the hero, who, in the grand tradition of the classical epic, personifies an entire people, is here not so much Vasco da Gama alone as a host of figures represented by the "illustrious Lusitanian breast, to which Neptune and Mars bowed down in obedience". With those figures are connected a series of events, facts, individual and collective deeds indissociable from the course of Portuguese history.

Camões witnessed the world-shaking events of his time with classical eyes in both life and literature, blending the magic of paganism with the tenets of the Christian faith and indeed—in a daring and brilliant stroke—transporting the mainsprings of his plot to the plane of action of the pagan gods who symbolized the forces of Nature, some favourable and some hostile to the Portuguese venture.

At the same time, however, he witnessed the planetary revolution of his time with a modern outlook that enabled him to reject earlier models and to strike a new balance between what his genius could extract from them and what the age required him to introduce and treat in an original and concrete manner. His aim was to set the literal truth of recent historical events and exploits against the legendary character of the ancient epics and, in so doing, to underscore the role which the Portuguese had played in the discovery of the world ("... and if there are other worlds, they will reach them ...").

He clearly saw the revolution of his time in terms of the then geocentric view of the structure of the universe, and this enabled him to construct one of the most moving episodes in the poem, that in which Vasco da Gama's sailors are welcomed to the Island of Love by the goddess Thetis and the navigator is allowed to cast his eyes on the "universal machine" and to know the future in a cosmogonic vision which is the culminating point of the apotheosis of love and glory, rewards reserved for heroes:

This universal vast machine you see,
Ethereal, elemental, He could found
By deep, high wisdom of infinity,
Who no beginning has, or mete or bound.
He, in His circle set eternally,
The whole sphere's well-smoothed surface, hedging round,
Is God, Whose nature none can comprehend
For human wit cannot so far extend.
The Lusiads, X, 80



Two illustrations from an edition of *The Lusiads* published at Madrid in 1639. Above, portrait of Vasco da Gama, the hero of Camões' epic. Below, the gods meet in council, an episode from the poem.

An encyclopaedic work

Since Camões was singing of real things rather than of "vain and fantastic exploits that are false and deceitful", he attached the highest importance to historical narratives and authentic eyewitness accounts of voyages by Vasco da Gama and other navigators, to details of navigation, technology, the calendar, wind systems, climates, natural phenomena, peoples and their customs, and to the accuracy of other aspects of Portuguese history.

Thus, apart from its inestimable literary and aesthetic merits, *The Lusiads* is a kind of encyclopaedia or compendium of much of the theoretical and practical knowledge available in its author's lifetime. It contains information on history and geography, anthropology, technology and science—ranging from flora and fauna to astronomy—and especially on the data gathered as a result of the ocean voyages and discoveries. Even when he refers to such natural phenomena as waterspouts and St. Elmo's fire, it can be assumed that he does so because they were recorded by João de Castro (1500-1548), a Portuguese naval officer who made important contributions to the science of navigation.

Almost every time he describes peoples, landscape, geography, the exotic features of Africa or the Orient, or incidents during Vasco da Gama's voyage, he bases his account on a chronicle, travelogue or some other document in an attempt to achieve strict accuracy combined with the mythological transpositions mentioned above.

Two Africans from the Cape of Good Hope. This illustration and those on pages 30 and 33 are from a mid-16th-century codex by an anonymous Indo-Portuguese painter who depicted peoples of Africa and the Orient with whom the Portuguese came into contact during their voyages. The manuscript is preserved in the Casanatense Library, Rome.

As the poet of the discoveries and of the epic of modern man, Camões did not lose sight of the two main driving forces behind maritime expansion. The first of these was the propagation of the faith, which was not to be construed exclusively as a crusading ideal dictated by the Ottoman threat to the eastern approaches to Europe, but also as the starting-point for the dissemination of a European culture. The second was the organization of trade on a worldwide scale for the benefit of all peoples. Camões was a European poet in the temporal sense, in that he enhanced, used and re-created a cultural heritage many centuries old. In a spatial, geo-political and economic sense, he was also a European poet who singled out Europe as a region with specific ties of solidarity and interests.

This is why Camões saw the voyage of Vasco da Gama not only as an expedition "to the greater glory of God" but also as a commercial venture, at the outcome of which the navigator presented the ruler of Calicut with proposals for engaging in peaceful trade to the mutual benefit of the King of Portugal and himself:

And if thou wilt with treaty and with pact
Of peace and friendship, open and divine,
Trade out of superfluity enact
Between his country's merchandise and thine,
Thus greater gain and plenty to attract
(For which in toil and sweat men chiefly pine);
Unto thy realms, then there will surely be
For him great glory, and great wealth for thee.
The Lusiads, VII, 62

This epitomizes the idea of trade between distant peoples as a source of wealth and abundance, of profit and glory. Here again, Camões' viewpoint is highly topical, in that he extols the skills and dignity of enrichment through trade based on the principle of reciprocity (while also seeking to impose moral constraints on such trade). Vasco da Gama showed determination and discipline in executing the orders given by the king, who became one of the world's leading traders when the era of major trading networks began.

Camões lived a full life. For seventeen years, he knew the fluctuating fortunes of a voyage to India, went to war, travelled to the Far East and experienced exile, adversity, disgrace, suffering and despair. In short, he paid a personal toll for the great discoveries.

Traces of his experience can be found in a number of main themes of *The Lusiads.* Equally skilled with the sword and the pen, he bitterly laments the oblivion or injustice of which he is the victim. He mentions the shipwreck he survived. He refers to the crises of his love affairs, which he personifies in the pathetic figure of the giant Adamastor and in the persecution of the nymphs on the Island of Love by the soldier Leonardo Ribeiro. He asserts his awareness of his genius and abilities and his readiness to continue singing to the present and future glory of his native land.

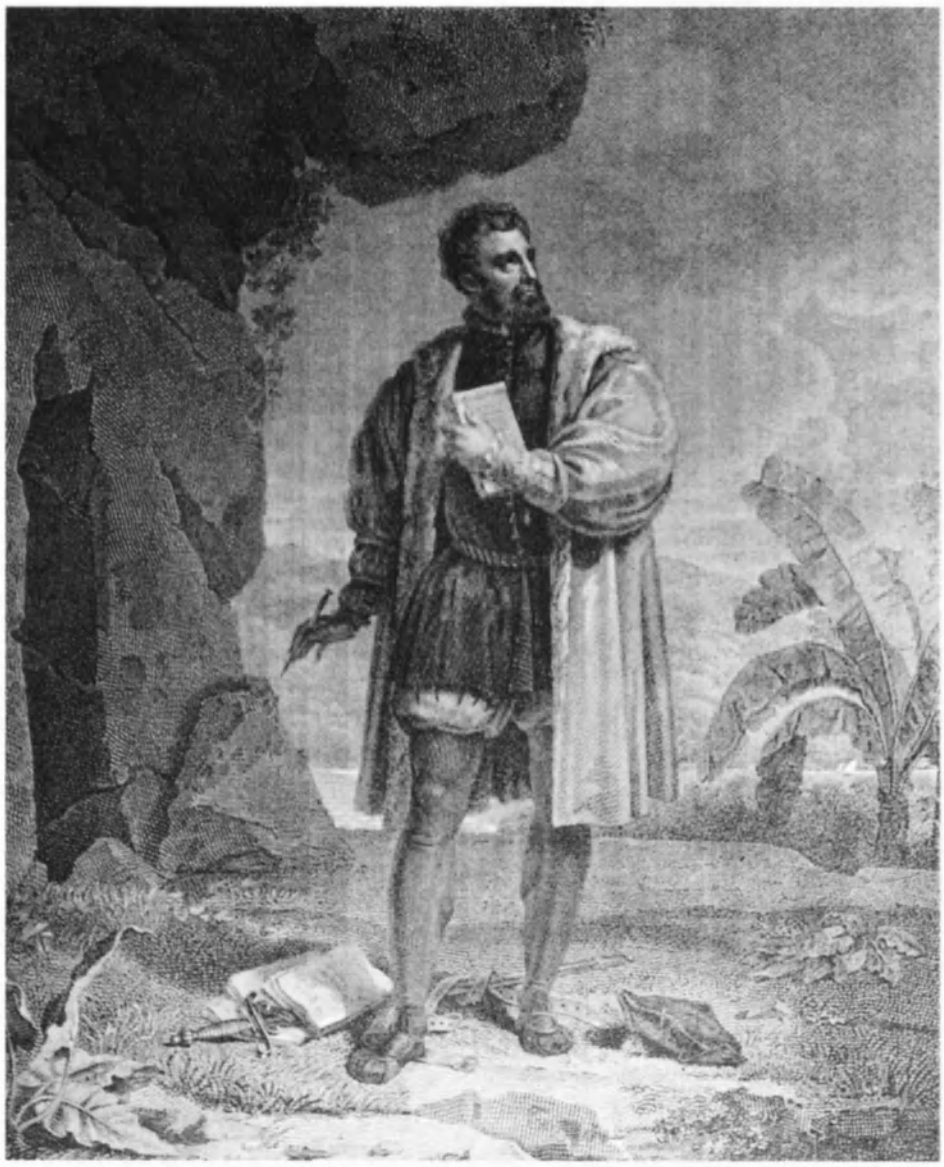
The entire corpus of Camões' work, with its hundreds of lyric poems, its letters and plays, highlights the contradictions inherent in a man who was torn between nostalgia for a supreme harmony and an acute sense of the absurdity and confusion of the world, between an affirmation of the values enshrined in human liberty and a sense of outrage at being nothing more than a puppet in the hands of fate, and between the inescapable and everlasting presence of unhappiness and the all too fleeting moments of life and human happiness. The ultimate contrast is that between the evil of the present and the good of the past, which inspires some of the most poignant features of Camões' work. ■

* Translation by Leonard Bacon from *The Lusiads of Luiz de Camões,* published by the Hispanic Society of America, New York, 1950.

VASCO GRAÇA MOURA is a Portuguese writer who has published a number of studies on Camões, the most recent of which is *Os penhascos e a serpente e outros ensaios camonianos* ("The Rocks and the Serpent, and Other Essays on Camões", 1987). He is currently serving on the National Board for the Celebration of the Portuguese Discoveries and as Portuguese Commissioner for the Seville Universal Exhibition of 1992.

The Lusiads FROM NATIONAL EPIC TO UNIVERSAL MYTH

BY EDUARDO LOURENÇO



Imaginary portrait of Camões is taken from a French edition of *The Lusiads* published in Paris in 1817 with illustrations by European artists.

THE Western maritime discoveries of the fifteenth and sixteenth centuries, in which Portugal played a leading role, were the culmination of an odyssey which had begun in ancient times. They extended the bounds of the adventure embarked on long before by the Phoenicians and the Greeks to all the seas of the world. The cycle of modern discoveries was symbolically closed in 1520 by Ferdinand Magellan, a Portuguese navigator who sailed for the King of Spain. After him there began an era of methodical, scientific exploration of what the twentieth-century poet Fernando Pessoa called the "endless sea", the mare nostrum of the Romans enlarged to global dimensions.

If this image exaggerates the real maritime area traversed by the navigators of Portugal, Italy, Spain and other European nations between the beginning of the fifteenth century and Magellan's voyage, it epitomizes the difference between the voyages of the Ancients and those of the modern era. In the first decade of the sixteenth century, Westerners acquired firm evidence that the Earth is round, and knew from "knowledge which owes everything to experience"—to quote a line of *The Lusiads*—of a sea that extended from Europe to Japan and from Greenland to Tierra del Fuego.

This knowledge was acquired the hard way, after more than a century of sporadic but methodical exploration whose modest beginnings led to the reconnaissance of the south Atlantic and the entire west coast of Africa. Underlying this exploration was the dream of sailing round a continent which was still little known to Europeans, in order to reach the Indies. The most amazing feature of this enterprise was that it should have been pursued for so long by a single country, Portugal, which often employed foreigners (Genoese, Catalans, even Castilians) in its service, while other, much richer and more powerful nations, which also possessed a maritime tradition, made no attempt to follow suit. The main reason for this was that most of the Portuguese voyages were not private undertakings like those of the great Genoese, Catalan and Venetian shipowners of the same period, or of the later French and English navigators, but a kind of state enterprise, even though their initiator was a prince, Henry the Navigator, and not the king.

The Portuguese maritime adventure was modern both in its means and in its results, but paradoxically it was "medieval" in character. By this we mean that it was simultaneously technical, mercantile and religious in character. When Camões wrote his epic a century and a half after the beginnings of maritime exploration, in a context that was already fully modern, this medievalism still dominated his vision of the world.

The aim pursued by the Portuguese navigators was tantamount to a crusade. The Christian cross emblazoned on the sails of their caravels was more than merely symbolic. At that period, from a really "modern", bourgeois standpoint like that of the Genoese or the Venetians, such an emblem would have been seen as an obstacle to communication with peoples of other cultures and religions. But the Portuguese voyages of exploration in the fifteenth century were undertaken on the initiative of an institution that was both religious and military, not to say militant. Later the enterprise became "royal" and therefore more "secular"—if such a word had any meaning in the Por-

tugal of that time. But the religious aspect of the discoveries was always present. This is what made them an extremely complex episode in the history of Western culture.

No one understood this complexity better than Camões. He celebrated the discoveries both as an extraordinary adventure of the human spirit, a fantastic acceleration in our knowledge of the universe and its mysteries—in other words, a challenge assumed by men against the gods—and as a crusade by Christian man, bearer of a faith that had recently been assaulted in other parts of Europe.

A unique poem in European as well as Portuguese culture, *The Lusiads* has always provoked perplexity as well as admiration among figures as various as Cervantes and Ezra Pound. It was written at a turning point in history. Its context is the end of the Renaissance—a twilight era full of energy and sensuality—but also the dawn of the baroque age, with its ambiguous interplay between day and night. Camões combines glorification of the daring modernity of his countrymen's maritime exploits with a fascination for ancient cultural models. Yet this attraction is far from passive. Indeed, it contains an element of challenge. Literally and figuratively, *The Lusiads* stands at a crossroads in history when the West, and especially the Iberian peninsula, was hesitating between exposure to a new historical situation, of which the discoveries were themselves the signal, and withdrawal into ethical and religious certainties which had been shaken by the material and conceptual upheavals of the Renaissance.

Camões emphasizes above all the chivalrous aspects of the Portuguese discoveries. But this chivalry, unlike that evoked by the Italian poet Ariosto (1472-1533), is realistic rather than dreamlike. He rejects the moral disorder which conquering expansion brought in its wake—the unbridled ambition, the corruption, the abuse of power, whose devastating effects he saw for himself in the East.

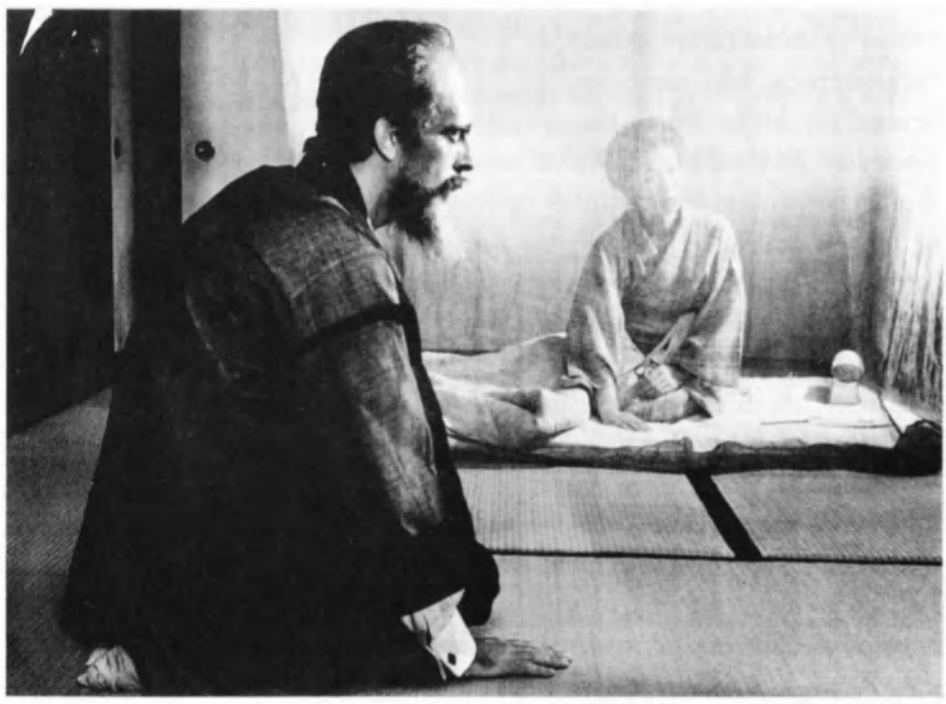
Above all—and this is where the poem elevates a national epic to the dignity of a universal myth—he was not content to transpose the Portuguese voyages into a heroic episode in the history of planetary discovery. He transmuted them into a kind of noble hymn to Eros, a naturalistic but also neo-Platonic version of the great Italian poet Petrarch's "Triumph of Universal Love", in which the Portuguese in a sense play the role of Argonauts. Petrarch's celebrated theme, still an

abstract vision, becomes in the hands of Camões fully dionysiac, a link and a place of harmony not only between Heaven and Earth but between humanity hitherto divided by space, race and prejudice. All Nature participates in the feast which crowns the exploits of Vasco da Gama's sailors. In the "Island of Love" episode, what begins as a hymn of national rejoicing becomes an epic of love, in which spirit and senses mingle. The heroic adventure, man's struggle with hostile elements, ends allegorically on this island, a dream of paradise where the force and violence of war assume the colours of love, and love assumes the colours of a new alliance between peoples.

Of course, the poem is marked by certain Western prejudices. It belongs to an era in which religious militancy was particularly fierce since Westerners felt that their faith was threatened. Despite this inevitable eurocentrism, and thanks to its universalist impulse, its ethical force, and its treatment of the whole range of human physical and spiritual experience, *The Lusiads* is far from being a mere eulogy of the Portuguese discoveries as an episode in the history of a people. Even more than a great hymn to a glorious moment in the destiny of Portugal, it is the epic of the European movement to new shores, to infinite possibilities in space and time. ■

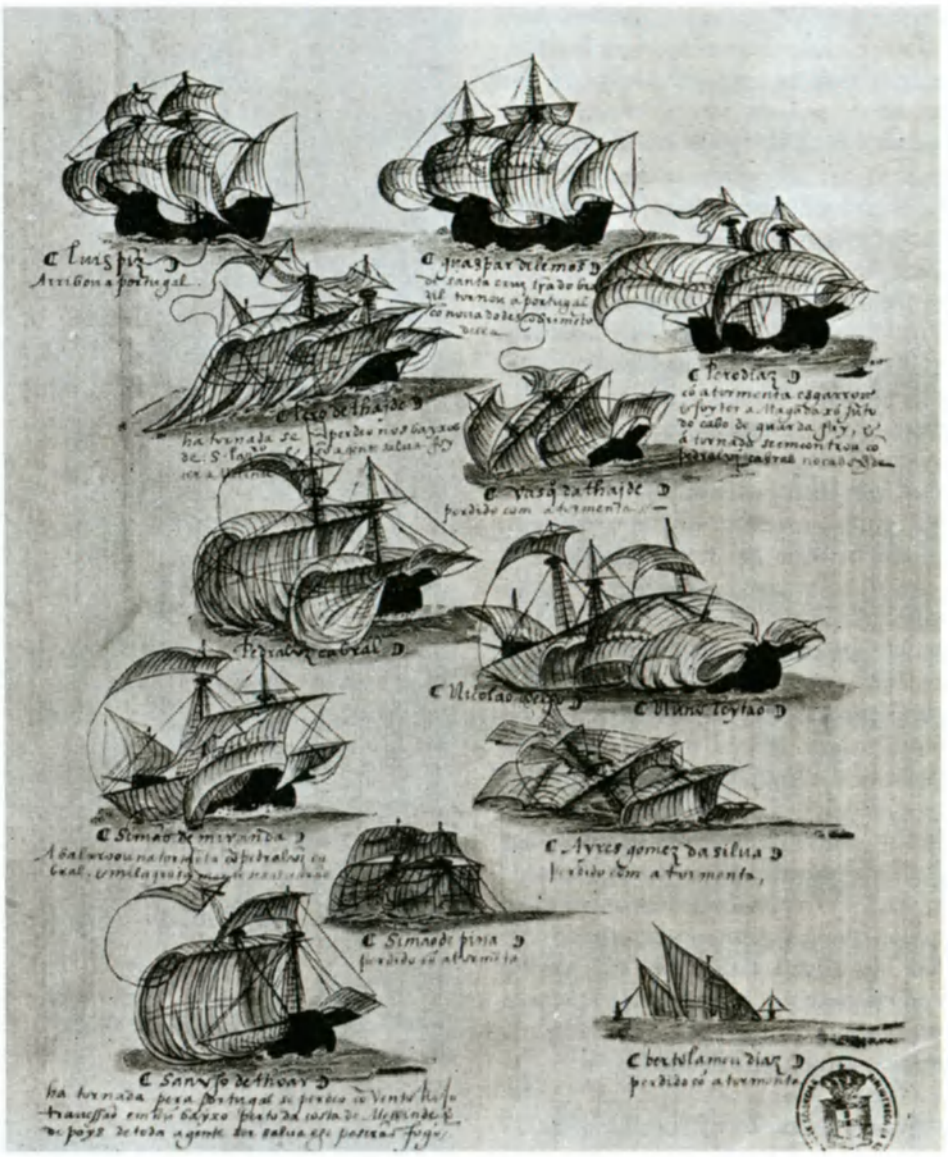
EDUARDO LOURENÇO, Portuguese essayist and literary critic, won the Prix Européen de l'Essai, awarded by the Charles Veillon Foundation of Lausanne, in 1988. He has taught in several European universities and from 1965 to 1988 was professor of literature at the University of Nice, France. His published works include a number of studies on the poet Fernando Pessoa.

Above, an illustration from the 1817 French edition of *The Lusiads*. It shows a scene described towards the end of the poem, the arrival of Vasco da Gama and his men on the "Island of Love". Below, a scene from the film *A Ilha dos Amores* (1982) by the Portuguese director Paulo Rocha which was inspired by the same episode.



CAMÕES AND BRAZIL

BY JOSUE DE SOUZA MONTELLO



Ships of Pedro Alvares Cabral's fleet which reached Brazil in 1500 are shown in this illustration from the *Livro das Armadas*, preserved in the Academy of Sciences, Lisbon.

Portuguese colonization of Brazil began after the arrival of Pedro Alvares Cabral in 1500. In the 16th century settlement was limited to the coastal plain. Penetration into the hinterland in the 17th and 18th centuries was largely carried out by groups of adventurers known as bandeirantes, *who went far beyond the limits which the Treaty of Tordesillas (1494) had established to divide Portuguese and Spanish spheres of influence in the Americas. "A country the size of a continent" thus came into being, with almost half the area and half the population of South America. At the beginning of the 19th century the new state obtained independence virtually without conflict, and Dom Pedro, son of the king of Portugal, was proclaimed emperor.*

Despite the violence inherent in any form of conquest, in the 15th and 16th centuries the Portuguese gave priority to sea-borne trade as opposed to military occupation. In the 17th century they began to consider the region as a second homeland rather than simply as an overseas colonial market. According to the Brazilian social anthropologist Gilberto Freyre, this process of integration is due to the fact that at the outset of her age of global expansion Portugal had been enriched by cultural and ethnic interchange between Europe and Africa.

The writings of Luís de Camões play an important role in the fraternity of Portuguese and Brazilian cultures. In the view of Brazilian writers such as Manuel Bandeira and Josué de Souza Montello, Camões' work is a familiar landmark in the cultures of all the Portuguese-speaking peoples and a bond between them.

BRAZIL does not figure largely in the corpus of Camões' writings, yet the great Portuguese poet has had a profound and highly significant influence on Brazilian literature, both directly and through the numerous studies that have been made of his work.

The imprint of Camões is evident in the clarity of the heroic, eight-line stanzas of *Prosopopeia*, an epic poem inspired by the impressions evoked by a new land and new people, by Bento Teixeira, one of our earliest poets and considered by some as the father of Brazilian literature. In his *História Concisa da Literatura Brasileira*, in the introduction to a chapter on the most important authors of the colonial period, Alfredo Bosi, one of the most knowledgeable specialists in this field, writes: "There is constant imitation of Camões' *Lusiads*, including the use of the same textual structure, mythological allusions and even specific turns of phrase."

Motifs inspired by the Americas, including representations of Brazilian Indians, appear in Portuguese art from the 16th century onwards. Above, allegory of the Americas on painted and glazed tiles *(azulejos)* is in the Municipal Museum at Viana do Castelo, Portugal.

The greatness of a poet lies not only in his own writings but also in the works he inspires and in his acceptance as a model—as though his contemporaries and successors want to revolve within his orbit. Permeating the different literary trends, from baroque to romanticism, from realism to symbolism, and even to modernism, the undisputed influence of Camões has affected poet, essayist and critic.

Joachim Maria Machado de Assis (1839-1908), as great a poet as he was a writer of prose, did not hesitate to admit Camões' influence. Nor did Alberto de Oliveira (1857-1937) who, by virtue of his masterly handling of the strict formalism of Parnassian verse, his vision, the breadth of his poetic work and the technical competence with which it is executed, has become accepted as the leading Brazilian of this school, in any way discount the ascendancy of Camões.

The following anecdote illustrates the great devotion to Camões of the author of *Canções Românticas* (1878). One day, while at the Brazilian Academy of Letters, Oliveira was stricken with a sudden respiratory problem. His doctor, Professor Aloysio de Castro, immediately came to his aid, but, instead of proffering him the usual medicaments, he quoted a line from *The Lusiads* and then asked from which stanza it came. Whereupon, Alberto de Oliveira, who by then was an old man, recited in a low and quavering voice the entire section of *The Lusiads* from which the line came. Then, suddenly, with a smile on his lips, he informed the doctor that his malaise had disappeared.

At the time of the rise of Modernism, Manuel Bandeira (1886-1968), originally a poet of the Symbolist school, wrote the following sonnet, inspired by Camões' poetry, while in a sanatorium in Switzerland in which he found himself in the company of the French poet Paul Eluard.

When the nostalgic humours of your race
With heavy doom clouds do the soul downweigh,
Seek still the glory time cannot efface
In the heroic beauty of your lay.

Genius through misfortune brought to grace
Warrior poet, Nature's non-pareil,
Love of the homeland, Portugal, blessed place,
In you there burns with fire as bright as day.

While yet ring through our minds the fiery lays
Of that proud stock who dangers did defy
On every continent the cross to raise.

For want of soldiers, poets, shall not die
The tongue in which you boldly sang in praise
Of mighty deeds of arms and blazons high.

In my opinion, this short poem is the most beautiful tribute rendered to the work of Camões by Brazilian literature, through the medium of one of its greatest contemporary poets.

What are the essential merits of Camões' work? In the first place, its rich variety of forms of expression, brilliantly adapted to the poet's own feelings and to the sensibility of the people to which he belonged, at a time when Portugal was consolidating its expansion. At times, the care Camões devotes to poetic expression and his continual concern for innovative techniques make him seem surprisingly modern.

Having scoured the literature written in Portuguese in search of a refinement comparable to that of Camões, I can only confirm that Portuguese poetry from medieval times to the present day has been extraordinarily enriched by that clarity which is one of the essential characteristics of Camões work.

Finally, here is another revealing anecdote. In his book *Vida e Morte do Bandeirante* ("Life and Death of the Bandeirante"), which is a compilation, based on a variety of legal documents, of the major episodes in the conquest of the hinterland of Brazil in which Portuguese, Spaniards and Brazilians took part, António Castilho de Alcântara Machado (1901-1935) refers to the literary works mentioned in these documents, whether in wills or in inventories. There he found the works of Camões alongside those of Quevedo; the epic, lyric poet beside the Spanish master satirist. And one *bandeirante* did in fact write his will on the back of a page of *The Lusiads*. ■

JOSUE DE SOUZA MONTELLO, Brazilian writer, has published many novels, plays and social and political studies which have earned him literary prizes both in Brazil and abroad. A member of the Brazilian Academy of Letters, the Portuguese Academy of History and the International Academy of Portuguese Culture, he is currently serving as his country's Ambassador to Unesco.

RIVALRY IN THE RED SEA BY IBN IYAS

Portugal's impact on the fortunes of Mamluk Egypt

"Arab merchants inhabiting the strait of Mecca, on the side of Arabia", the inscription on this illustration from a Portuguese codex is testimony to the Portuguese presence in the Red Sea in the 16th century (see caption page 25).

Ibn Iyas, born in 1448 in Cairo, was the author of a 6-volume history of Egypt, totalling over 3,000 pages. The chronicle opens, as was the custom at that time, with the creation of the world and closes in 1522, shortly before its author's death.

During the last period recorded by Ibn Iyas, Mamluk Egypt was experiencing her final days of glory. The Egyptians were faced with a dual challenge. To the north-east, Ottoman Turkey was exerting growing pressure as a prelude to her domination of the entire Islamic world. To the north-west, Portugal, whose ships had rounded Africa, thus gaining access to the trade routes of the Indian Ocean, was threatening to destroy the commercial lifeline which linked Egypt and the Arab world with southern Asia.

In 1498, three ships under the command of Vasco da Gama had dropped anchor at Calicut, on the south-west coast of India. The first European ships to reach India, they were followed by fleet after fleet of Portuguese merchantmen. In 1500, an Egyptian fleet lying off Calicut was bombarded by the Portuguese, and Portuguese vessels were stationed at the outlet of the Red Sea to bar the way to Egyptian and Arab ships bound for the Indian trade routes.

Egypt was to concede defeat on both counts. She lost control of the seas at around the same time as she relinquished her political independence to Constantinople. For four long centuries, Egypt would be shown on the maps of the Ottoman empire as a mere administrative division.

We publish below an extract from Ibn Iyas' lively and detailed account of this dramatic turnabout in the history of Egypt, in which he concentrates on the effect that the Portuguese were having on Arab trade and on Egyptian life.

RABI II 911* (September 1505): The sultan formed an expeditionary force to resist European incursions along the coast of India. A large number of soldiers were mobilized and the preparation of equipment was actively pursued.

Djoumada II (November): This force included reservists and Mamluks of the sultan's guard, most of whom were Maghrebians, black archers and Turkomans. The sultan added masons, carpenters and labourers to their number to build fortified towers and a wall to surround the city of Jeddah. On Monday 6 (4 November) the army corps which had been assembled for the Indian expedition left Cairo, to the cheers of a great crowd. Husayn Mouchrif commanded the Mamluks, the Turkomans and the Blacks, and the Maghrebians were under the orders of Nour al-din Maslati. These troops, who had to travel to Jeddah by sea, left Cairo to embark at Suez. By order of the sultan, they were accompanied by a number of vessels loaded with provisions and weapons.

Safar 912 (July 1506): News was received of the detachment on its way to India to resist the European incursions. As soon as he arrived at Jeddah, the commander-in-chief Husayn had begun to construct towers along the coast, with the collaboration of Sonqour, the armourer, and Maslati, the Maghrebian. This was the wisest thing to do, and the constructions were very fine. The same army seized the port of Suakin unopposed, the spices stored there were confiscated and the population deported. The sultan greatly rejoiced at these successes.

Dhoul-Hidjdja (April-May 1507): The courier of the pilgrimage came back to report that the Egyptian army had entered Mecca and had made the Pious Halt at Arafat. He added that the Europeans were still making forays along the Indian coast; that Husayn, the commander in chief of the army bound for India, had begun the construction of towers on the shore near Jeddah as well as round the city itself; and that ships were ready to leave for Aden. The sultan appeared pleased with this news. Later, the audacity of the Europeans knew no bounds: over twenty of their ships dared to enter the Red Sea, attacking the Indian merchant vessels, lying in ambush to intercept the convoys, and seizing cargoes, with the result that the importation of many goods was interrupted. Because of this it was very difficult to procure turbans and muslin veils in Egypt.

It was said that the Europeans had succeeded in breaching the sea wall built by Alexander the Macedonian, son of Philip. This breach had been made in a stretch of land separating the sea route to China from the Mediterranean. For years the Europeans had been desperately trying to widen this opening to allow their vessels to enter the Red Sea. Such had been the beginnings of this commercial war.

Cha'ban 914 (December 1508): It was learned that the army sent to India under the command of Amir Husayn had won a victory over the Europeans who were overrunning the Indian Ocean. A great quantity of booty had been taken. On the orders of the sultan, who was overjoyed with this news, the sound of drums resounded for three days together. Husayn asked for reinforcements to bring the European troops to their knees.

11 Moharram 915 (1 May 1509): The chamberlain, Ala addin, left for Tor to oversee the construction of vessels intended for the Indian expedition.

Safar 915 (June 1509): It was learned that the army in India, commanded by Husayn Mouchrif, had suffered a crushing defeat. The Europeans had wiped it out and had plundered all its ships. The sultan appeared extremely dismayed by this news.

Safar 916 (May 1510): An envoy from the Prince of Cambay, Mahmoud Shah, together with other Indian nobles, brought missives in which these princes insisted that troops should be sent to the Indian coast, which was overrun with European pirates. The audacity of the Europeans knew no bounds and, following their victory over Husayn, the commander of the Egyptian expeditionary force, they were contemplating settling in the country.

Thursday, 30 Ramadan 918 (9 December 1512): This day saw the return, after an absence of almost seven years and three months, of Amir Husayn, the same who had led the Indian expedition. In the course of his campaign he had fought engagements with the Europeans and had thus been faced with many tribulations and untold dangers. It will be recalled that he had been responsible for the construction of the surrounding wall and towers at Jeddah and that these were fine pieces of workmanship. At that time he had taken on the role of governor of Jeddah and had shown himself to be arbitrary and conceited. A tax of ten per cent had been imposed on merchants, and the people, who had greatly suffered under his injustices, had found him intolerable. He had established friendly relations with certain Indian princes and, on his return to Egypt, he brought back an envoy from King Mozaffar Shah ibn Mahmoud, Prince of Cambay, whose father had recently died. This diplomat had come to ask the caliph to accord diplomatic credentials to Mozaffar Shah. The sultan issued courtly robes to Amir Husayn and to this envoy, and they left the Citadel in solemn procession.

Year 920 (1514): No cargo was delivered at the port of Jeddah because of the European corsairs sailing in the Indian Ocean. It had been at least six years since merchandise had been unloaded in the port of Jeddah.

Contemporary portrait of Afonso de Albuquerque, early 16th-century governor of the "State of India", at a time when Portuguese activities in the Indian Ocean were leading to commercial and military rivalry with the Islamic countries of the region, as documented by Ibn Iyas.

Mombasa (in present-day Kenya) as depicted in an engraving from *Civitates orbis terrarum* (see lower photo page 18). The city, fortified by the Portuguese in the 16th century as part of their trading network around the Indian Ocean, was a centre of Portuguese and Arab rivalry for over a century.

Thursday, 13 Djoumada I 920 (6 July 1514): A detachment was assembled to go to India with the aim of resisting the European attacks, which we had heard were again on the increase.

Thursday, 20 Djoumada I 920 (13 July 1514): The governor of Jeddah made it known that the Europeans were continuing their attacks on the Yemen coast and that they had just taken Kamaran, the trading-post for Indian merchandise in the Red Sea. General Husayn begged the sultan to send reinforcements before the Europeans occupied the entire Yemen coast. Moreover he feared that there would be an attack on Jeddah.

Monday, 12 Djoumada I 921 (24 June 1515): The sultan took up quarters at the Hippodrome to review the fifth regiment. More than 600 of these soldiers were conscripted to go to India; among their number were young recruits, Mamluks of the sultan's guard, veterans and reservists. Having been told of the ravages that the Europeans were constantly perpetrating in the Indian Ocean, which was overrun with European ships, the sultan decided to have some twenty ships built at Suez, and to load them with weapons, guns, and cannons, as well as with other engines of war. Salman the Ottoman was appointed admiral of this fleet, with many seamen under his command, both Ottoman and Maghrebian, in all 2,000 men, perhaps more. Having picked the soldiers, the sultan asked them to leave as soon as possible.

The month of Cha'ban 923 (August 1517): This month saw the return of the Ottoman admiral, Salman, who had accompanied the flotilla sent to India by Sultan Ghauri. It was then learned that this admiral had had Husayn, the governor of Jeddah, thrown into the sea. This was the outcome of an old quarrel, going back to the reign of Ghauri. After the latter's death, Salman, now the more powerful of the two, had killed Husayn: such at any rate was the rumour. Salman brought back a certain number of Europeans captured in the Indian Ocean, where they were engaged in a trade war and were intercepting merchant ships traversing those waters. Admiral Salman, together with Husayn, had conquered several Indian towns, which had brought them untold riches.

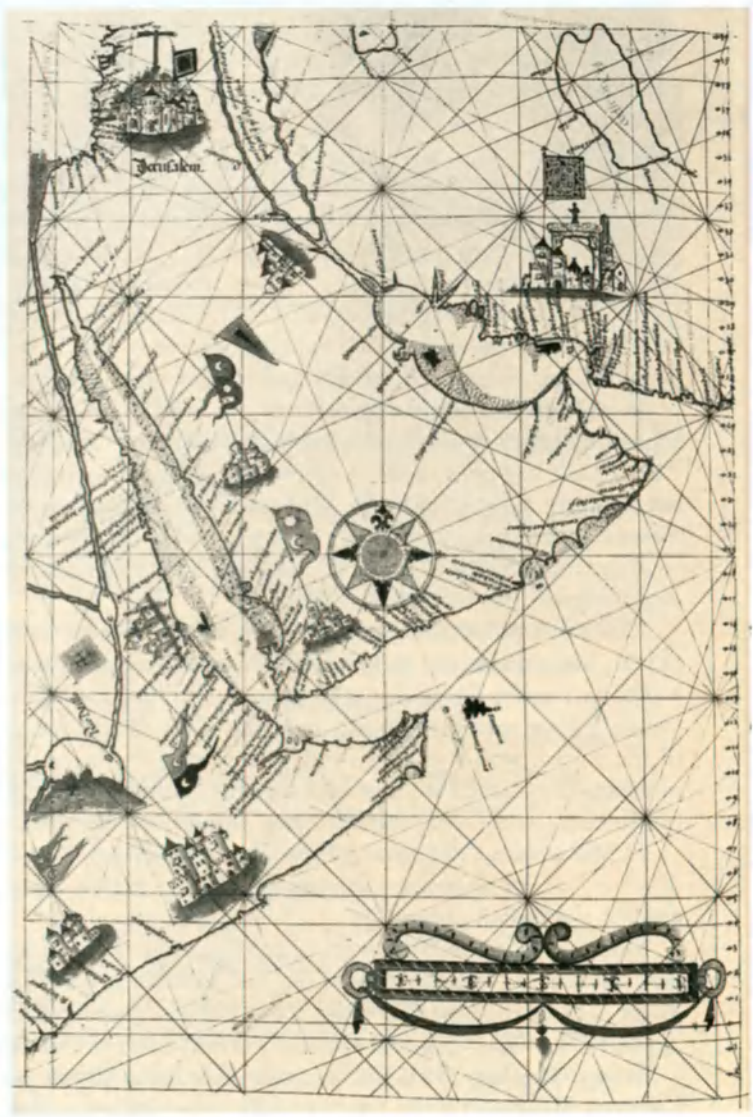
The month of Djoumada II 924 (June 1518): According to sources in Mecca, European corsairs were sailing in the Red Sea and intercepting merchant ships. The sharif had sent a report to the prince of the amirs, governor of Egypt, requesting him to send an expeditionary force as soon as possible, because fears were mounting of a surprise attack on the port of Jeddah, and the Muslims could not prevent the city's defeat.

Ramadan 925 (September 1519): It was learned from Mecca that the presence of around forty European vessels had been reported in the Red Sea, in the vicinity of Jeddah, which were attacking and intercepting merchant ships. In the light of this information, the prince of amirs, governor of Egypt, after a review of Circassian Mamluks and other troops, designated some 300 soldiers, both Mamluks and volunteer horsemen, to escort the pilgrims and to establish a garrison at Jeddah in order to resist the Europeans in the event of a surprise attack.

Thursday 28 Ramadan 925 (23 September 1519): This was the day of departure for the corps bound for the port of Jeddah. The contingent which started its march this day was made up of Circassian Mamluks and Turkomans, in all some 300 men who had been taken from these two regiments. The commander was an Ottoman named Husayn, commander of the light cavalry. They went to Suez, from whence they embarked on the Red Sea for Jeddah. The destructive raids of the Europeans, who were sailing in the vicinity of the port of Jeddah and were terrorizing merchants, were much spoken of at this time. ■

* Islamic chronology, reckoned from the date of the *hijrah* (Hegira), the Prophet's journey from Mecca to Medina. *Editor*

The central regions of the Portuguese "State of India", including India itself, Persia, Arabia and the Red Sea, are shown on this Portuguese map from an anonymous book of seamanship published in 1560 and preserved in the archives of the Ministry of Finance, Lisbon. Fortified ports such as Goa, Hormuz and Aden are also indicated.



'CHRISTIANS AND SPICES'

The Portuguese in India

BY JOHN CORREIA AFONSO

CAMÕES masterpiece *The Lusiads*, Portugal's national epic, tells the story of a small nation which in the space of a little over a century carried its flag and its faith far across the seas to Africa, to Brazil and as far away as Japan. Singing of "heroes who, leaving their native Portugal behind them, opened the way to Ceylon and beyond, across seas no man had ever sailed before", it reminds us that Portugal played an important part in unrolling "the Great Map of Mankind" in the fifteenth and sixteenth centuries, beginning with Vasco da Gama's great voyage to India in 1497-1498.

We do not deal here with the impulses behind the Age of Discovery. Suffice it to mention that, according to British historian Charles Boxer, the four main motives which inspired the Portuguese were, in chronological order: crusading zeal; desire for Guinea gold; the quest for Prester John*; and the search for spices.

Whatever their motives, the Portuguese, by their discoveries, not only extended the limits of the world known to Europe, but contributed greatly to its more accurate representation. At the end of the fifteenth century, a revolutionary cartographical innovation was made with the introduction of a scale of latitudes, and subsequently, following the great discoveries, Portugal became the European centre for geographical and cartographical knowledge. Alberto Cantino's famous planisphere (1502) is the earliest dated map to delineate the Portuguese discovery of India (see centre colour pages).

However, the Portuguese did more than sail and chart the seas. They also traded, and conquered and settled lands. The domination of the Portuguese on the coasts and seas of Africa and Asia is essentially and peculiarly connected with the beginnings of that maritime expansion of Europe and Christendom, which, above all else, marks off the modern from the medieval world.

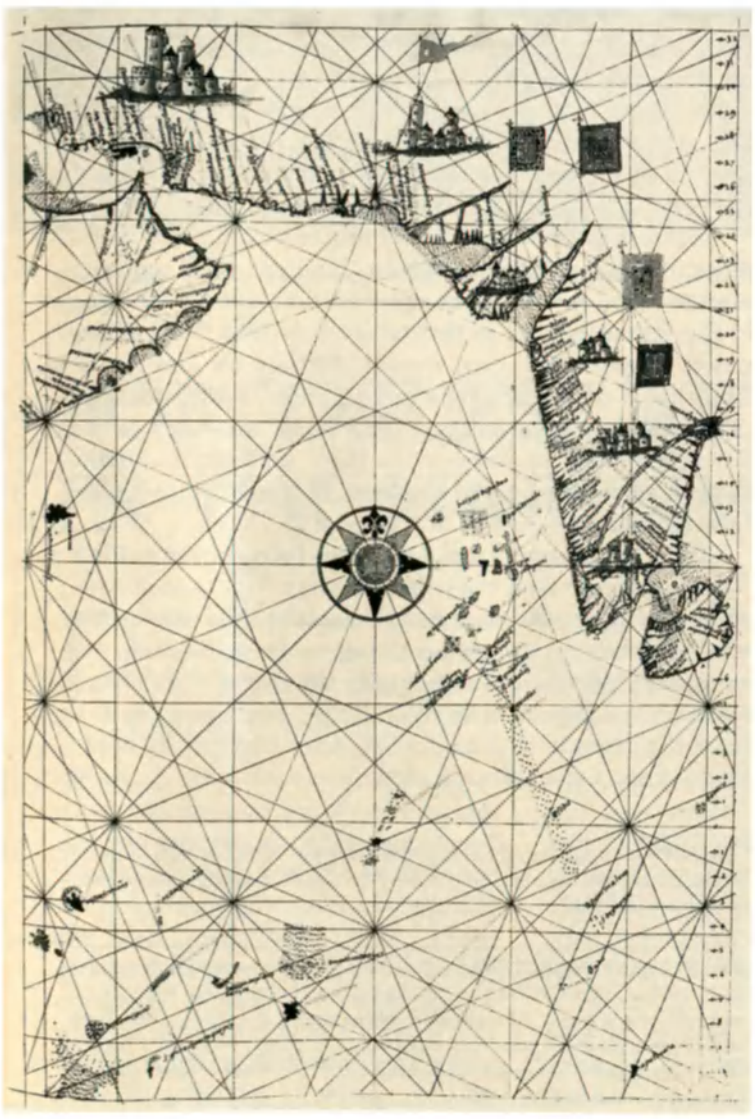
Here indeed was the beginning of a New Age, for before the Iberian discoveries the most striking feature of the history of civilization was the dispersion and isolation of the different branches of mankind.

As Boxer points out, "it was the Portuguese pioneers and the Castilian *conquistadores* from the western rim of Christendom, who brought together, for better or for worse, the widely sundered branches of the great human family. They thus first made humanity conscious, however dimly, of its essential unity."

This unity was given new meaning by the bonds of trade. Not only were the two hemispheres brought closer to each other, but the European merchants engaged in coastal trade also helped to bring parts of Asia closer to one another, linking India, South-East Asia, China and Japan.

The Portuguese also showed Europe how to trade profitably in areas of advanced civilization, and although they were not devoid of cruelty in their relations with native princes and their peoples, their relations with native rulers were generally speaking based on mutual respect and even "cousinly" friendship.

Contrary to popular belief, the Portuguese were more concerned with trade than with conquest. In the sixteenth century, there were probably no more than 10,000 able-bodied Portuguese in all Portugal's overseas territories. It would have



This illustration from the Casanatense Codex attests to the Portuguese presence in China, which they reached in 1513.

been foolish of them to believe that India could be conquered and held by such small numbers. And so the high-sounding term *Estado da India* ("State of India") in fact designated basically a series of trading posts along commercial sea routes controlled by Portugal in varying degrees.

If desire for commercial gain rather than military or political motives was the driving force behind Portuguese expansion, this was allied to evangelical and missionary zeal. The reported answer of Vasco da Gama's men when questioned at Calicut about the reason for their long journey is well known: "Christians and spices", they allegedly replied. This close association between God and Mammon was the hall-mark of the empire founded by the Portuguese in the East, and, for that matter, in Africa and in South America.

Detail from a Flemish tapestry commissioned in the early 16th century by the King of Portugal. A fine example of the influence of Oriental motifs on the European art of the period, it shows some of the animals that Portuguese navigators brought back from their voyages.

Catholicism of a rather autocratic nature, and the fact that in territories under Portuguese control no effort was made to adapt Western Christianity to the culture and outlook of the Indian people, has led many historians to regard Portuguese evangelism as a phase in and a tool of European expansion. Others maintain that the missionaries did to some degree seek to divorce themselves from the political and economic ambitions of their fellow-countrymen.

It is often claimed that there was no colour-bar or racial discrimination in the Portuguese colonies. This is an exaggeration. It is true that the Portuguese were usually more liberal in this respect than the Dutch, the English or the French colonizers. On the whole the Portuguese rulers took the line that religion and not colour should be the criterion for full Portuguese citizenship, and that all Asian converts to Christianity should be treated as the equals of their Portuguese co-religionists. Yet for a very long time the religious orders in the Portuguese possessions would not admit non-whites to their ranks and, in India, among the Portuguese themselves, odious distinctions were made between the *Reinois* (those born in Portugal itself) and the *Indiaticos* (those born in Asia of Portuguese parents). In India, the Portuguese kings usually favoured the policy of inter-racial marriages initiated by Afonso de Albuquerque, the conqueror of Goa.

Another reason for the greater permanence of Portuguese influence in Asia was the wide acceptance of their language, which became a commercial *lingua franca* in the East. Even the Dutch, who defeated the Portuguese at sea, found that it was futile to take drastic measures against the use of Portuguese, which was "an easy language to speak and easy to learn".

Vasco da Gama sighted India on 18 May 1498, and two days later dropped anchor a few kilometres north of Calicut, at the port of Capocate. It was not till the end of the month that he was received by the Zamorin (ruler) of Calicut who was far from impressed by the gifts da Gama brought, although apparently pleased with the contents of the letters of which he was the bearer.

A second Portuguese fleet, under Pedro Alvares Cabral, arrived in 1501. Cabral became embroiled in a quarrel with the Zamorin, and, learning that the ruler of the rival port of Cochin hated the Zamorin and was eager to trade with the Portuguese, he called at Cochin, established friendly relations there, and loaded a cargo of pepper. Next he made friends with the Rajah of Cannanore.

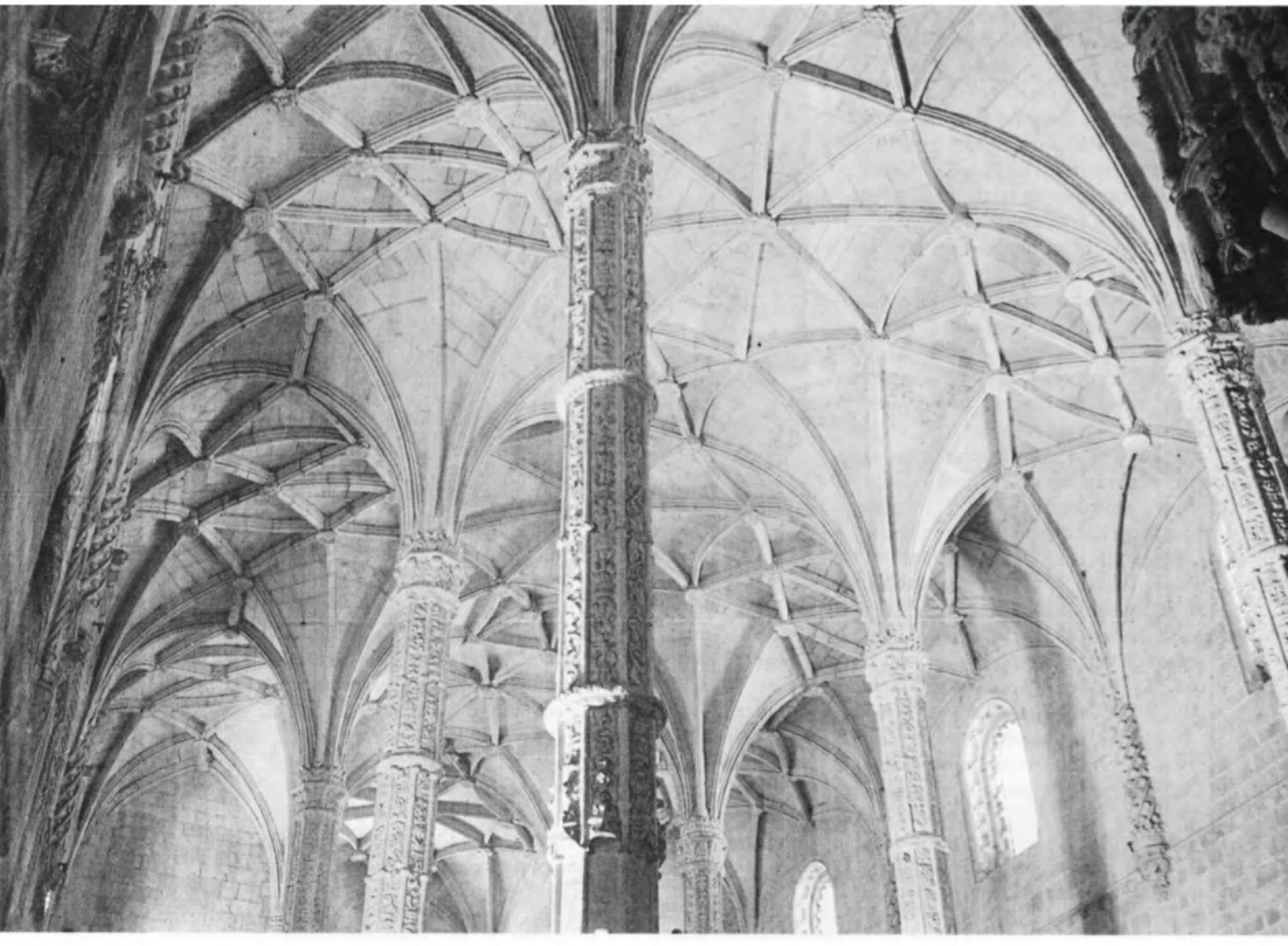
However, the most important event in the establishment of the Portuguese *Estado da India* was the capture of Goa from the forces of the Sultan of Bijapur in November 1510. Goa provided the Portuguese with an excellent natural harbour and was better situated than Cochin as a naval base. This conquest also convinced the Indian rulers that the Portuguese meant to stay. Moving northwards along the west coast of India, the Portuguese also acquired the ports of Bassein, Bombay, Daman (Damão) and Diu.

The Portuguese were the first Europeans to establish themselves in India, and the last to leave. Four and a half centuries were to pass between the conquest of Goa and the lowering of the Portuguese flag in that territory in 1961. During that time they put down deeper roots than did the Dutch, the English and the French elsewhere in India. One has only to travel along the west coast of India to see the stamp of the Portuguese presence. Religion, language, architecture, music, cuisine—these are some of the areas in which we recognize Lusitanian traits.

As the Portuguese chronicler João de Barros wrote in 1540: "The Portuguese arms and pillars placed in Africa and in Asia, and in countless isles beyond the bounds of three continents, are material things, and time may destroy them. But time will not destroy the religion, customs and language which the Portuguese have implanted in these lands." Pretentious as this prophecy may sound, it has, in fact, been substantially borne out for four and a half centuries. ■

* Legendary sovereign thought in medieval Europe to rule a Christian kingdom in central Asia. Later reports, especially by Portuguese explorers, situated him in Ethiopia. *Editor*

JOHN CORREIA AFONSO, a Jesuit priest from Goa, India, is director of the Heras Institute of Indian History and Culture, Bombay, and editor of the Institute's review *Indica*. A former professor of history at Xavier College, Bombay, he has organized a number of international seminars on Indo-Portuguese history. His published works include *Jesuit Letters and Indian History* (Oxford University Press, Bombay, 1969).



The voyages of discovery strongly influenced the Late Gothic form of Portuguese architectural ornamentation known as the "Manueline" style, in which marine and nautical motifs are prominent. Above, pillars and vaulting of the Jerónimos monastery in Lisbon, one of the most typical examples of this style.

PORTUGUESE ART IN THE MARITIME ERA

BY RAFAEL DE FARIA D. MOREIRA

DURING Portugal's Golden Age of Discovery—from the conquest of Ceuta, Morocco, in 1415, to the death of Prince Henry the Navigator in 1460—Portuguese art was predominantly Gothic, then the common aesthetic standard throughout the Western world. Yet this was not the exuberant, florid Gothic of the great French cathedrals, but a simpler, more down-to-earth, less erudite and intellectual version, closer perhaps to the vernacular and to the less ornamental architecture of the mendicant religious orders and of the Cistercians. In modest buildings such as the still essentially Romanesque Hermitage of Our Lady of Guadaloupe, near Sagres, and constructions built to a serene, rigorously geometric design (such as the lesser cloisters of the monasteries of Batalha and Tomar) it is possible to detect the personal tastes of Henry the Navigator. His was a classical ideal of beauty which found its full expression in the canvases of the court painter Nuno Gonçalves whose paintings exude a powerful mystic force and a sentiment of respect for the value of the individual (see pages 2 and 8).

It would, however, be a mistake to take this Franciscan humility as a sign of weakness. According to Reynaldo dos Santos, the polyptych for São Vicente, six panels painted by Nuno Gonçalves for the See of Lisbon between 1460 and 1465, as the city's tribute to the leader of the conquest of Morocco, "reflects a new vision of Nature and of man". As redolent of Mediterranean humanism as it is of nordic realism, this work is one of the masterpieces of European painting. Moreover, the buildings in English Late Gothic style (such as those built by the French architect Huguet between 1402 and 1438 at the monastery of Batalha), the Tuscan-style paintings that Prince Henry seems to have admired so much (probably the work of João Gonçalves who in 1432 painted the fine Renaissance frescoes

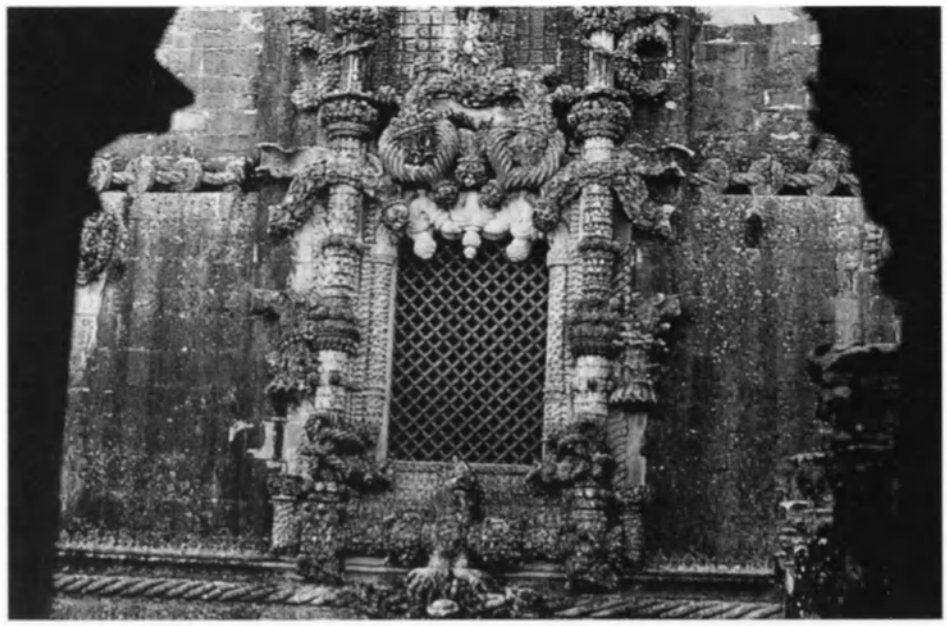
in the Abbey of Florença) as well as the Moorish style of the Royal Palace at Sintra where King João I (1385-1433) received foreign envoys and visitors (among them the great Flemish painter Jan van Eyck) in exotic surroundings suited to his status as "Lord of Ceuta", are all contemporary aesthetic manifestations whose cosmopolitan nature is an expression of human diversity and receptivity.

Once feudal dominion over the Maghreb had been established, the seaborne thrust towards India became Portugal's national goal. Old legends were revived, fuelled by medieval accounts of fantastic voyages, of the conquests of Alexander the Great and tales of Troy which pictured Asia as a region of fabulous wealth inhabited mainly by Christians. To the subjects of King João II (1455-1495), an alliance with Prester John was not only a possibility but a necessity in the context of expansionist ambitions in which greed for gold became inextricably mixed up with the goal of recapturing Jerusalem and spreading the Christian message.

This ideal undoubtedly had a strong influence on the arts and on the collective "cultural imagination". Even before the "discovery" of the sea route to India (which was not achieved until Vasco da Gama landed at Calicut in 1498, although after 1486 it was considered only a matter of time), the mere expectation of such a great feat was enough to provoke a heightened tension in the final phase of the Gothic in Portugal. The situation in the arts at the end of the fifteenth century, with its experiments in the incorporation of the exotic (through such hybrid forms as Afro-Portuguese ivory art) and the lavish ornamentation favoured by the artists at court, could be seen as a preparation for Vasco da Gama's "encounter with history".

There has been much discussion about oriental influences on the development of the distinctively Portuguese style, known as Manueline art as a tribute to King Manuel I (1469-1521) who gave it the standing of official style of the kingdom. It has rightly been pointed out that direct contact with Indian art would only have occurred after the process of conquest was well advanced. It was, however, an "imagined India" rather than any direct influence from the subcontinent that proved such an irresistible fount of impressions and experiences.

Whatever its source, Manueline art was first and foremost a royal, Christian art, strongly linked to the medieval tradition and to a system of mythical values of which this style claimed to be the definitive statement. It was a "modern" art form in the sense that it adopted contemporary thought as a strident and euphoric affirmation of faith in history. Nothing could be more instructive than to observe the way in which the king had himself portrayed in these works—as a man, kneeling in the divine presence as a humble donor; as a king, in the regalia of one of the Three Kings or as King David, that is to say, as one who leads the way to an era of greatness.



This window in the Convent of Christ monastery at Tomar is a masterwork of Manueline art. Tomar was the headquarters of the Order of Christ, which played an important part in the Portuguese voyages of discovery.

Let us take as examples of this complex symbolic framework reflecting the Manueline notion of modernity two related monuments (both recently inscribed by Unesco on the World Heritage List) in which the intervention of King Manuel can be seen. Along the River Tagus on the outskirts of Lisbon, at Restelo, the point of departure of successive fleets on their voyages of discovery, the huge Jerónimos monastery houses the tombs of the king and his family, guarded by a small extravagantly decorated fort. There, at the gateway to the ocean, at the most westerly point of Europe, the monastery (begun in 1501) and the Tower of Belém (1514) are monuments to the wealth and invincible power of the king who ordered their construction.

Further north, at Tomar in central Portugal, stands the Monastery of Christ, built by the military Order of Christ, which played an important role in the voyages of discovery. In 1510, the original rotunda of the church was extended by the addition of a huge nave, the proportions of which were identical with those of the Sistine Chapel in the Vatican and which was intended, like the Sistine Chapel, as a setting for great and solemn ceremonies. The famous window in the upper part of the west façade is an epitome of the aesthetic message of Manueline art, a piece of religious and political rhetoric transposed into stone.

However, the Golden Age announced by the ideologists of the Portuguese court and visually expressed by the artists of the time was to lose its attraction—and the Manueline style was to lose its topicality—with the turning of the page marked by the end of the great discoveries (without any of the millenarian prophecies being fulfilled) and with the bloody consolidation of Portuguese power in the East.

Lord of the trade routes from Brazil to Japan, first maritime power of the modern era and one of the greatest of all time, Portugal alone could be compared to the Roman empire. Was Manueline art to serve as a model for a new form of artistic expression of the might of Christendom? Just as Portuguese power declined throughout the sixteenth century, so too did Manueline optimism wane; it was to be the post-medieval spirit of the Italian Renaissance that would satisfy the need for a new form of artistic expression. ■

RAFAEL DE FARIA D. MOREIRA, of Brazil, is a lecturer in the history of art at the New University of Lisbon. He is the author of a monograph on the Jerónimos Monastery, Lisbon, a thesis on 16th-century Portuguese architecture, and many specialized articles. An expert on military architecture, he is preparing a history of Portuguese fortifications around the world for publication in 1990.

FERNANDO PESSOA AND THE SPIRIT OF DISCOVERY

BY JOSE AUGUSTO SEABRA

Two of Portugal's greatest poets, Luís de Camões and Fernando Pessoa, as portrayed by the Portuguese artist José Almada Negreiros.

THE Portuguese voyages of discovery left behind them a broad, indelible wake on the surface of modern history and culture. In literature, not only did they inspire the sixteenth-century epics of Camões, they also profoundly marked the works of his spiritual successor, Fernando Pessoa, Portugal's great modern poet. In Pessoa's writings, however, the voyages of discovery are treated not simply as a tribute to a glorious past, but as a prophetic projection of that past into the future. In the first poem of his *Mensagem* ("Message"), a collection of verse published in 1934, Pessoa writes of the "future of the past", and throughout the book he develops the visionary, messianic theme of the "Fifth Empire"[1] and of the "Portuguese Sea" symbolically spreading out to become the "universal mother".

Pessoa, the poet of many heteronyms,[2] made no attempt to duplicate *The Lusiads*, the national epic that recounts Vasco da Gama's voyage of discovery against the background of the history of Portugal. Instead he transforms his country's history into an initiatory voyage with other ships and other seafarers, symbolic figures on a spiritual quest for the occult, like the quest for the Holy Grail, under the banner of the Rosicrucians. Dom Sebastian, the "Longed-for, Hidden King" of the Portuguese, is the mythical embodiment of that quest and his return, like that of Ulysses, is awaited with endless patience. Returning to the homeric sources and tracing through Greek, Roman, Christian and European tradition, Pessoa announces the advent of a "New Renaissance" that Portugal would bring to the world

and whose minstrel would be a "Super-Camões".

This prophecy had already figured in the first major writings to appear under Pessoa's signature on his return to Lisbon, fired with patriotism that had religious and universalist overtones, following his childhood and adolescence in South Africa. These writings were published in the magazine *A Aguia* ("The Eagle") of Oporto, the organ of the "Portuguese Renaissance" movement. In the Republic then established in Portugal, this movement preached the values of "Lusitanian civilization", invoking *saudade*[3] in the sense of nostalgia for the past, but also for the future.

Drawing inspiration from the movement's charismatic poet, Joaquim Teixeira de Pascãoes (1877-1952), Pessoa attempted to define the trends of the "new Portuguese poetry", under the pretext of carrying out a sociological and psychological analysis, so as to draw from it the elements of a poetic form of a stature to match his exalted vision of new caravels setting out to discover a "New India", not an earthly geographical and historical place but a transcendent land of dream. "And its true, supreme destiny, of which the deeds of the navigators were but an obscure and flesh-bound dress rehearsal, will achieve divine fulfilment" he concludes, in an outburst of messianic zeal.

It can be sensed that, in his mysterious pronouncements, the poet, who surreptitiously equates himself with the "Super-Camões", takes as his starting point the concept of "discovery", to which he attaches more importance than to the actual discoveries themselves, giving it a new meaning which, like King Sebastian, remains for ever hidden. He goes from the exoteric to the esoteric; the more one discovers about things external to oneself, the more deeply is the truth hidden; error piles upon error and deviation upon deviation. The initiatory voyage is, in fact, always an interior voyage. As he wrote in another poem from *Mensagem:*

Far from ourselves we go in search
Of who we really are.

And in the same poem he talks of the impossibility of return, since "God allows us no departure".

In his writings Pessoa constantly harks back to the Portuguese discoverers, whom he sees as the creators of the "modern world". But their discoveries were, above all, a cultural, a "civilization-creating act". This is why the founding of a colonial empire never was and never would be of importance to Portugal. "Colonies are not necessary for what I imagine to be the destiny of Portugal", he wrote in 1934. For Pessoa dreamed of a Portugal which he conceived of as a "cultural empire" and a "spiritual force". For the "ridiculous old-fashioned imperialism" of the "generals" and the "politicians" he substituted "the imperialism of the grammarians" and "the imperialism of the poets".

The emblem of Lisbon is a ship, sometimes shown with 2 ravens as in this allegorical depiction dating from the late 16th century.

As the poet of a language become homeland, a universal homeland, nevertheless, with multiple tongues and many identities, the Super-Camões would be the poet *par excellence* of this new imperialism. The same Pessoa who wrote "my country is the Portuguese language", also affirmed, faithful to his religious, Rosicrucian ecumenism, that "God speaks every language".

This God who, in the spirit of Pessoa's "neo-paganism", encompasses all other gods, is not the God of Camões. Nor are the gods of the *Mensagem* the same as those from pagan mythology who throng the pages of *The Lusiads*, superimposing themselves upon the Christian God. Pessoa's gnostic brand of Christianity, like that of the Templars, proclaims another kind of "Holy War", the struggle for peace and fraternity made possible by the Portuguese discoveries which brought into contact the beliefs and civilizations of East and West, of North and South:

For God desired that all the world be one,
And that the sea unite and not divide.

This is the divine plan traced out in the poem dedicated to Prince Henry the Navigator, the opening poem of the *Portuguese Sea*, the second part of Pessoa's anthology. And in *The Ascension of Vasco da Gama*, after the "Gods of the Tempest", symbolized in myth as "The Monster", we see "the heavens open up to receive the soul of the Argonaut", the "Last Captain" who, following the route traced and marked with stone pillars by Diogo Cão and Bartolomeu Dias, finally rounded the Cape of Good Hope and opened up the long-dreamed-of route to India.

The "New India" has now become an India where berth caravels built of "such stuff as dreams are made on", where the symbolic and the imaginary dissolve into a new reality of which the myths of "Sebastianism" and the "Fifth Empire" are the poetic expression.

It is to this new spirit of discovery and voyaging that Pessoa invites the Portuguese of today: "We must begin by intoxicating ourselves with this dream, absorbing it into ourselves and embodying it... Then, in the very soul of the Nation, will occur that unforeseeable alchemy from which will spring New Discoveries and the Creation of a New World ..." ■

1. A reference to a myth which relates that King Sebastian of Portugal, who died at the battle of Alcazarquivir (1578), will one day return to found a "Fifth Empire" of universal peace.

2. Pessoa created a series of alter egos ("heteronyms") whom he endowed with their own life-stories and whose poems he wrote for them. (See *Unesco Courier*, November 1988).

3. A feeling of intense nostalgia and of being torn between the call of the sea and attachment to the homeland. *Editor*

JOSE AUGUSTO SEABRA, Portuguese poet and essayist, is professor of literary theory and of Portuguese literature at the University of Oporto and a specialist on Fernando Pessoa. A former member of parliament and Minister of Education, he is currently serving as his country's Ambassador to Unesco.

Photo credits

All illustrations in this issue, apart from those mentioned below, are published by kind permission of the National Board for the Celebration of the Portuguese Discoveries, who are the sole copyright holders.

Covers: © National Maritime Museum, London. **Page 19 (above):** © Vieira da Silva, ADAGP 1989, Paris/private collection of Agustina Bessa-Luís, Oporto, Portugal. **Pages 24, 27 (above):** © Calouste Gulbenkian Foundation/Portuguese Cultural Centre, Paris. **Page 27 (below):** © Jean-Loup Passek, Paris. **Pages 28, 31:** © Jean-Loup Charmet, Paris. **Page 29:** © Alfredo Pinheiro Marques, Lisbon. **Page 37 (below):** © Modern Art Centre, Calouste Gulbenkian Foundation, Lisbon.

The early Portuguese maps and charts in this issue are reproduced from a collection entitled *Portugaliae Monumenta Cartographica*, by A. Cortesão and A. Teixeira da Mota, which was reissued in 1988 by the Imprensa Nacional and the Casa da Moeda, Lisbon.

The Portuguese maritime expeditions exacted a heavy toll in human lives. This illustration from the Codex Lisuarte de Abreu (1558) shows a Portuguese shipwreck in the Indian Ocean (Pierpont Morgan Library, New York).

The Courier

A window open on the world

Published monthly in **35 languages** by Unesco, The United Nations Educational, Scientific and Cultural Organization
A selection in **braille** is published quarterly in English, French, Spanish and Korean

Editorial, Sales and Distribution Office:
Unesco, 7, Place de Fontenoy, 75700, Paris.

Editorial staff (Paris)

Director: Bahgat Elnadi
Editor-in-chief: Adel Rifaat

Managing Editor: Gillian Whitcomb
English edition: Roy Malkin, Caroline Lawrence
French edition: Alain Lévêque, Neda El Khazen
Spanish edition: Miguel Labarca, Aracelli Ortiz de Urbina
Arabic edition: Abdelrashid Elsadek Mahmoudi
Braille edition:
Illustrations: Ariane Bailey
Art Unit/Production: Georges Servat
Research: Violette Ringelstein
Liaisons with non-Headquarters editions: Solange Belin
Sales and subscriptions: Henry Knobil

Non-Headquarters editions:

Russian: Georgi Zelenin (Moscow)
German: Werner Merkli (Berne)
Japanese: Seiichiro Kojima (Tokyo)
Italian: Mario Guidotti (Rome)
Hindi: Sri Ram (Delhi)
Tamil: M. Mohammed Mustafa (Madras)
Hebrew: Alexander Broïdo (Tel Aviv)
Persian: H. Sadough Vanini (Teheran)
Dutch: Paul Morren (Antwerp)
Portuguese: Benedicto Silva (Rio de Janeiro)
Turkish: Mefra Ilgazer (Istanbul)
Urdu: Hakim Mohammed Said (Karachi)
Catalan: Joan Carreras i Marti (Barcelona)
Malaysian: Abdul Manaf Saad (Kuala Lumpur)
Korean: Paik Syeung-Gil (Seoul)
Swahili: Domino Rutayebesibwah Dar-es-Salaam)
Croato-Serb, Macedonian, Serbo-Croat, Slovene: Bozidar Perkovic (Belgrade)
Chinese: Shen Guofen (Beijing)
Bulgarian: Goran Gotev (Sofia)
Greek: Nicolas Papageorgiou (Athens)
Sinhala: S.J. Sumanasekera Banda (Colombo)
Finnish: Marjatta Oksanen (Helsinki)
Swedish: Manni Kössler (Stockholm)
Basque: Gurutz Larrañaga (San Sebastian)
Thai: Savitri Suwansathit (Bangkok)
Vietnamese: Dao Tung (Hanoi)
Pashto: Nasir Seham (Kabul)
Hausa: Habib Alhassan (Sokoto)

Subscription rates
1 year: 90 French francs.
Binder for a year's issues: 62 FF

Individual articles and photographs not copyrighted may be reprinted providing the credit line reads "Reprinted from the *Unesco Courier*", plus date of issue, and three voucher copies are sent to the editor. Signed articles reprinted must bear author's name. Non-copyright photos will be supplied on request. Unsolicited manuscripts cannot be returned unless accompanied by an international reply coupon covering postage. Signed articles express the opinions of the authors and do not necessarily represent the opinions of Unesco or those of the editors of the *Unesco Courier*. Photo captions and headlines are written by the *Unesco Courier* staff. The boundaries on maps published in the magazine do not imply official endorsement or acceptance by Unesco or the United Nations. The *Unesco Courier* is produced in microform (microfilm and/or microfiche by: (1) Unesco, 7 Place de Fontenoy, 75700 Paris; (2) University Microfilms (Xerox), Ann Arbor, Michigan 48100, U.S.A.; (3) N.C.R. Microcard Edition, Indian Head, Inc., 111 West 40th Street, New-York, U.S.A.; (4) Bell and Howell Co., Old Mansfield Road, Wooster, Ohio 44691, U.S.A.

All correspondance should be addressed to the Editor-in-chief in Paris

Imprimé en France (Printed in France) -
Dépôt légal: C1 - Avril 1989.
Photogravure-impression: Maury-Imprimeur S.A., Z.I. route d'Etampes, 45330 Malesherbes.

ISSN 0041-5278
N° 4 - 1989 - OPI - 89 - 1 - 467 A